

THE
ARCHITECT
& BUILDING NEWS

8 APRIL 1954

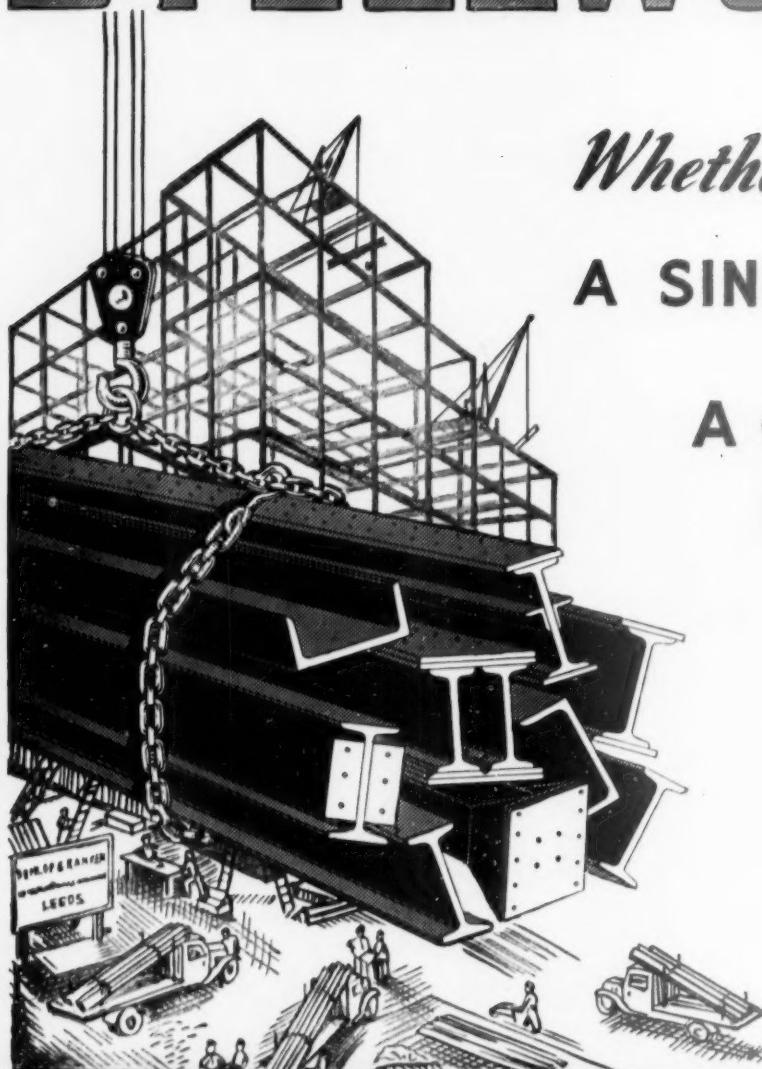
VOL. 205

No. 14

ONE SHILLING WEEKLY

- LAKE SHORE DRIVE APARTMENTS, CHICAGO
- STRUCTURAL HONESTY
- Sighthill Competition winning design

STEELWORK



Whether you want
**A SINGLE JOIST
OR
A COMPLETE
BUILDING**

Try

D & R
STEELWORK
SERVICE

DUNLOP & RANKEN

CONSTRUCTIONAL ENGINEERS
IRON & STEEL STOCKHOLDERS

TELEPHONE
27301 (20 LINES)

LEEDS

TELEGRAMS
"SECTIONS LEEDS"

"*As I look* at that beautiful picture of my work,
I'm proud. I heaves a sigh of satisfaction, my eyes fill up and
I sez to myself, "Elmer don't have to worry, he's a boy that's got hisself
a privy, a m-i-g-h-t-y, m-i-g-h-t-y, p-r-e-t-t-y p-r-i-v-y."

Lemuel Putt *



THE new Williams & Williams Roften Privies† would have delighted the heart of old Lemuel Putt. The new Roften are pretty — you can have them in any colour; and they are mighty because they will last a very long time.

There is a myriad of reasons why you should specify Roften—here are just a few :—

1. Roften toilet compartments are cheaper than brick and tiles : prefabrication makes them easy and quick to erect.
2. They can be grouped in any number.
3. They are made of high quality sheet steel which is **rustproof**, fire resistant and won't harbour germs.
4. The doors are double skinned to prevent warping.
5. They will stand up to climatic conditions in any part of the world.
6. The clean straight lines are in keeping with modern trends in design.
7. Roften are supplied in finished colours to specification.

If you are putting toilet compartments into schools or hospitals, factories or offices we should be glad to tell you about the new Roften lavatory units. Please write or telephone.

† *Lavatories or even toilet compartments if you wish Sir.*

* *The Specialist by Charles Sale : Putnam, 42 Great Russell Street, London, W.C.2.*

The Pressed Metal Division of

WILLIAMS & WILLIAMS Limited

ROFTEN WORKS HOOTON CHESHIRE
or telephone our nearest Area Office. There are 17 of them.

WATES DOUBLE THE RATE OF HANDING OVER

**New-Tradition Houses Provide
Speedy, Economic Alternative to Brick Housing**

APPROVED—and proved in practice

Designed to meet the urgent needs of post-war housing, the WATES New-Tradition House has proved remarkably successful as a solution to the problem of building the greatest number of permanent houses in the shortest time for the lowest cost. By the beginning of this year over 18,000 WATES Houses and Flats had been included in municipal housing schemes. Compared with traditional brick houses, the rate of handing over is approximately two to one.

Saving time, manpower, bricks

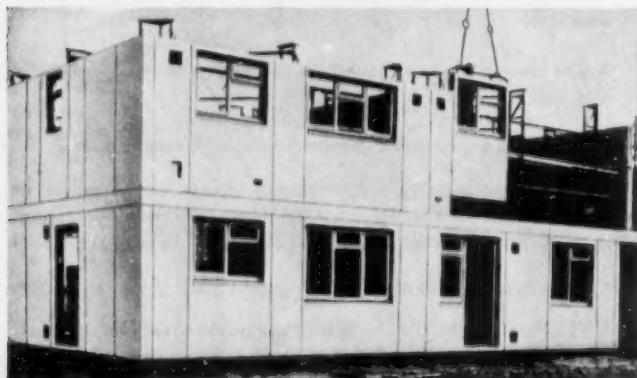
The basis of construction of the Wates New-Tradition House is the erection on site of factory-made high-grade reinforced concrete units concrete-bonded to form the shell of the house. A patented tubular steel jig is erected to position and support the units and is removed when the shell is completed. Erection is mechanised, manhandling being eliminated by the use of mobile cranes. Bricks are used only in the chimney stack.

Variety of Designs

Contemporary in style and amenities, Wates New-Tradition Houses compare more favourably with many more costly traditional brick houses. The available designs include semi-detached and terraced houses with specially modified plans to suit the Mining Areas, old people's bungalows and flats of up to six storeys. Internal layouts meet today's demands for space and easy running and these may be modified to satisfy local requirements.

Grouping

This flexibility gives an unusual degree of freedom in estate layout and greatly simplifies the task of providing homes for families of varying sizes. Awkward frontages become less of a problem and, in addition to the balanced grouping which pairs and terraces permit, very pleasing variety in roof tiling and colour finishes can be introduced.



Placing first-floor panels in position. Each panel weighs up to 10 cwt. and is handled by a mobile crane. Units are erected in four courses; ground floor, string course, first floor and eaves course.

If you are interested in any way in building more houses more quickly at lower cost, write for further information on Wates New-Tradition Housing, including the Wates booklet: 'Permanent Housing in Reinforced Concrete.'



Typical completed houses, built by Wates New-Tradition methods to provide homes that are comfortable and pleasant to look at.

Ample Living Space

All Wates New-Tradition houses have two, three or four bedrooms, the planning providing a living room running the full depth of the house. This type of design gives the roomiest possible living space—and is suitable for sites of any aspect. The fuel store is outside. In terraces of four houses there is a central passage way, the space above which is shared by the two houses adjoining.

Advisory Service

Wates New-Tradition Housing is backed by over half a century of successful house building and civil engineering practice. Wates technical resources include highly mechanised and up-to-date pre-casting factories, as well as a carefully selected panel of well-known and highly reputable Contractors by whom Wates Houses are built under licence. Close liaison is maintained with these Contractors to ensure that the latest improvements in production and erection are promptly employed.

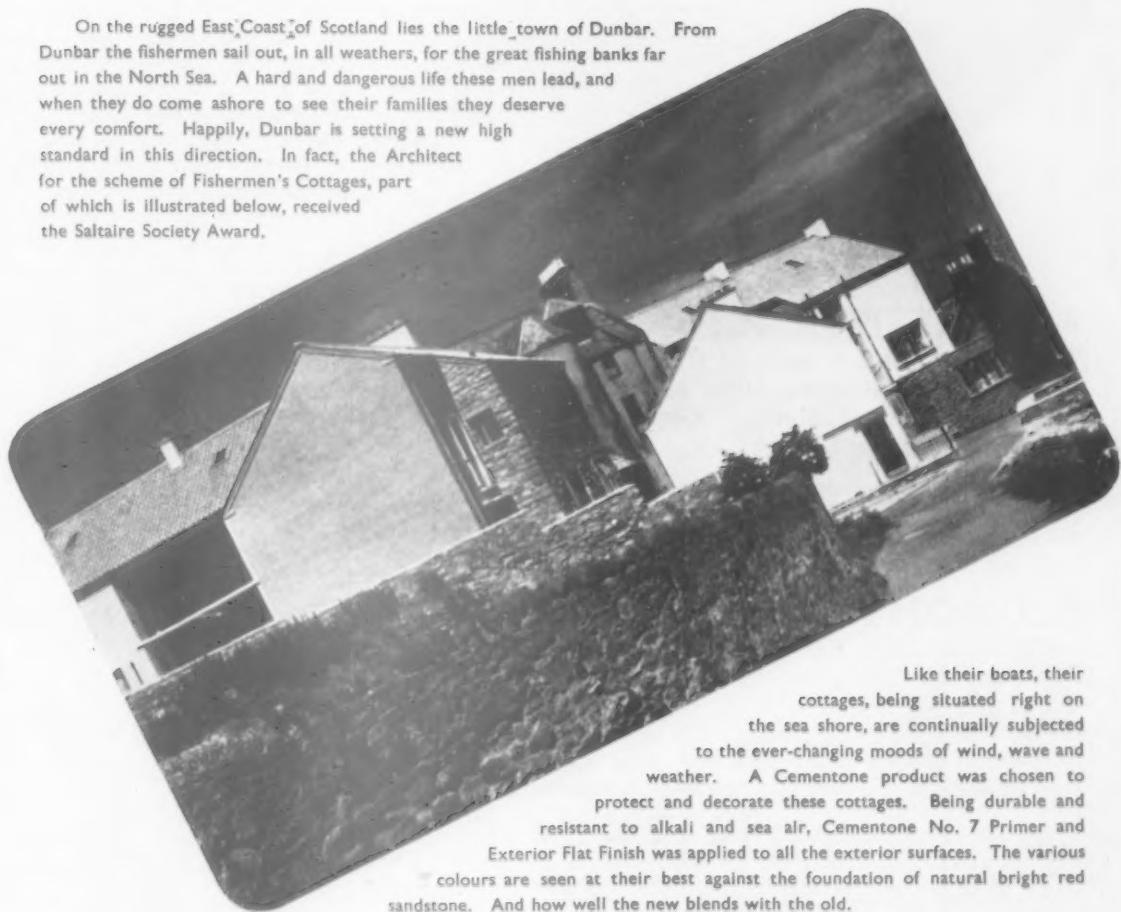
In addition, Local Authorities and others are invited to draw fully and freely on the Wates Technical Advisory Service. This service covers site layout preparation and complete development schemes, including roads and sewers. Many Local Authorities have found that consultation with the Wates Organisation during the early stages of planning has saved a very considerable amount of work.

WATES BUILD

WATES LTD., Building & Civil Engineering Contractors
1258/1260 LONDON ROAD, LONDON, S.W.16. Telephone: POLLards 5000 (15 lines)
LONDON • NEW YORK • DUBLIN

Cementone again!

On the rugged East Coast of Scotland lies the little town of Dunbar. From Dunbar the fishermen sail out, in all weathers, for the great fishing banks far out in the North Sea. A hard and dangerous life these men lead, and when they do come ashore to see their families they deserve every comfort. Happily, Dunbar is setting a new high standard in this direction. In fact, the Architect for the scheme of Fishermen's Cottages, part of which is illustrated below, received the Saltaire Society Award.



Like their boats, their cottages, being situated right on the sea shore, are continually subjected to the ever-changing moods of wind, wave and weather. A Cementone product was chosen to protect and decorate these cottages. Being durable and resistant to alkali and sea air, Cementone No. 7 Primer and Exterior Flat Finish was applied to all the exterior surfaces. The various colours are seen at their best against the foundation of natural bright red sandstone. And how well the new blends with the old.

The Cementone Handbook gives full particulars of Cementone No. 7 and many other products which have been specially manufactured to solve most colouring, waterproofing and decorating problems. Your copy of this Handbook will be sent to you, free, on request.

JOSEPH FREEMAN SONS & CO. LTD., CEMENTONE WORKS, LONDON, S.W.18

MANUFACTURERS OF COLOURS, HARDENERS,

Telephone : VANDYKE 2432 (5 lines)



WATERPROOFERS AND DECORATIVE FINISHES

Telegraphic Address : CEMENTONE, WESPHONE, LONDON

COMPLETE PLASTER

Specifications for

ARCHITECTS



"Murite"
REGD TRADE MARK
GYPSUM PLASTER

MURITE ADVANTAGES

FIRE RESISTANCE "Murite" Plasters when set revert to Gypsum. This mineral contains 20% of Chemically combined water which must be driven off before dangerous temperatures can be reached. This water barrier is one of the reasons why "Murite" Gypsum Plasters have such excellent fire-resisting properties.

WORKABILITY "Murite" Plasters are simple to use. Scientific factory processing and a controlled set give superb working properties and allow ample time for first class results to be obtained.

ECONOMY "Murite" Plasters have a greater covering capacity than other similar plasters. The undercoat grades also require less sand therefore they effect a considerable saving in use.

SPEED "Murite" Plasters set completely within a few hours. If required, two coat work can be completed the same day and certain types of decoration can be started almost immediately without fear of failure.

MURITE GRADES

1
FIBRED PLASTER
FOR SANDED
UNDERCOATS
ON WALL AND
CEILING BOARDS,
WOOD LATH, ETC

1A
SPECIAL FIBRED
PLASTER FOR
SANDED UNDER-
COATS ON METAL
LATHING AND
CONCRETE

2
BROWNING
PLASTER FOR
SANDED UNDER-
COATS ON WALLS

3
WALL FINISH FOR
FINISHING ALL
CLASSES OF
SANDED
UNDERCOATS

BOARD FINISH
FOR SINGLE COAT
WORK ON ALL
TYPES OF WALL
AND CEILING
BOARDS, CEMENT
RENDERINGS, ETC

DESCRIPTIVE FOLDER AVAILABLE UPON REQUEST



CAFFERATA & CO. LTD.
NEWARK • NOTTS.
TELE : NEWARK 2060



BEACON ALUMINIUM DOUBLE-HUNG SASHES



ABBOTSFIELD SCHOOL, HILLINGDON.

Architect: C. G. Stillman, F.R.I.B.A.

Architect to the Middlesex County Council

JOHN THOMPSON BEACON WINDOWS

LIMITED

Ettingshall, Wolverhampton & Imperial House, Kingsway, London, W.C.2

Telephone BILSTON 41121

Telephone TEMPLE BAR 3216

COMPLETE PLASTER

Specifications for

ARCHITECTS



"Murite"
REGD. TRADE MARK
GYPSUM PLASTER

MURITE ADVANTAGES

FIRE RESISTANCE "Murite" Plasters when set revert to Gypsum. This mineral contains 20% of Chemically combined water which must be driven off before dangerous temperatures can be reached. This water barrier is one of the reasons why "Murite" Gypsum Plasters have such excellent fire-resisting properties.

WORKABILITY "Murite" Plasters are simple to use. Scientific factory processing and a controlled set give superb working properties and allow ample time for first class results to be obtained.

ECONOMY "Murite" Plasters have a greater covering capacity than other similar plasters. The undercoat grades also require less sand therefore they effect a considerable saving in use.

SPEED "Murite" Plasters set completely within a few hours. If required, two coat work can be completed the same day and certain types of decoration can be started almost immediately without fear of failure.

MURITE GRADES

1
FIBRED PLASTER
FOR SANDED
UNDERCOATS
ON WALL AND
CEILING BOARDS,
WOOD LATH, ETC

1A
SPECIAL FIBRED
PLASTER FOR
SANDED UNDER-
COATS ON METAL
LATHING AND
CONCRETE

2
BROWNING
PLASTER FOR
SANDED UNDER-
COATS ON WALLS

3
WALL FINISH FOR
FINISHING ALL
CLASSES OF
SANDED
UNDERCOATS

BOARD FINISH
FOR SINGLE COAT
WORK ON ALL
TYPES OF WALL
AND CEILING
BOARDS, CEMENT
RENDERINGS, ETC

DESCRIPTIVE FOLDER AVAILABLE UPON REQUEST



CAFFERATA & CO. LTD.
NEWARK • NOTTS.

TELE : NEWARK 2060



BEACON ALUMINIUM DOUBLE-HUNG SASHES



ABBOTSFIELD SCHOOL, HILLINGDON.

Architect: C. G. Stillman, F.R.I.B.A.
Architect to the Middlesex County Council

JOHN THOMPSON BEACON WINDOWS

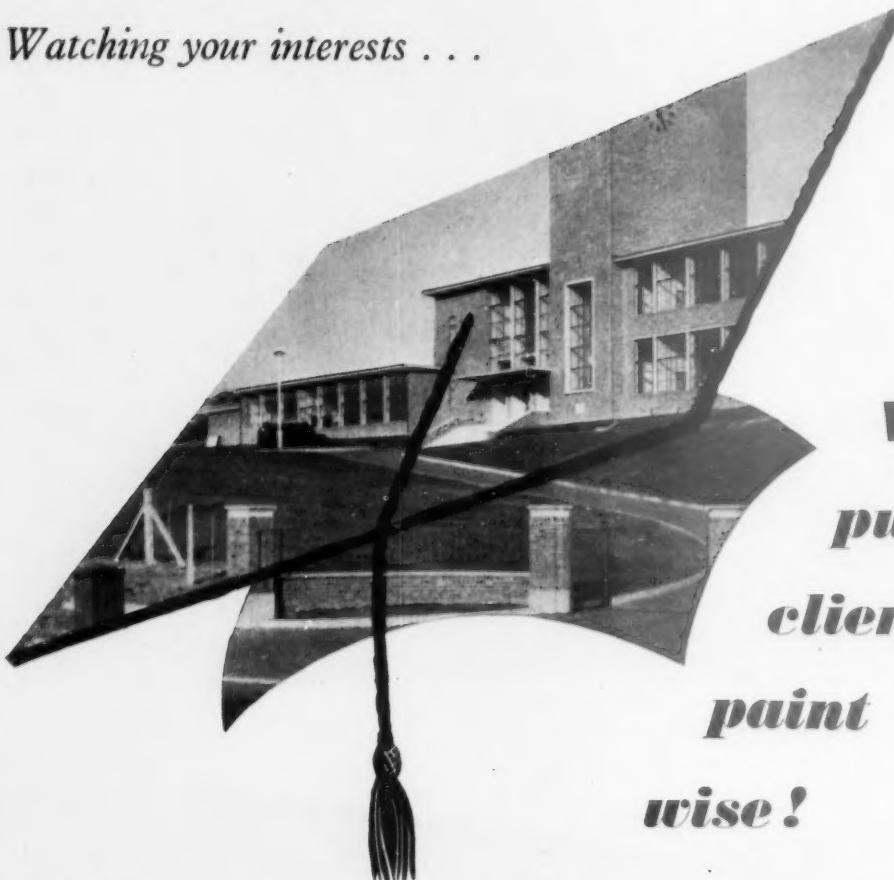
LIMITED

Ettingshall, Wolverhampton & Imperial House, Kingsway, London, W.C.2

Telephone BILSTON 41121

Telephone TEMPLE BAR 3216

Watching your interests . . .



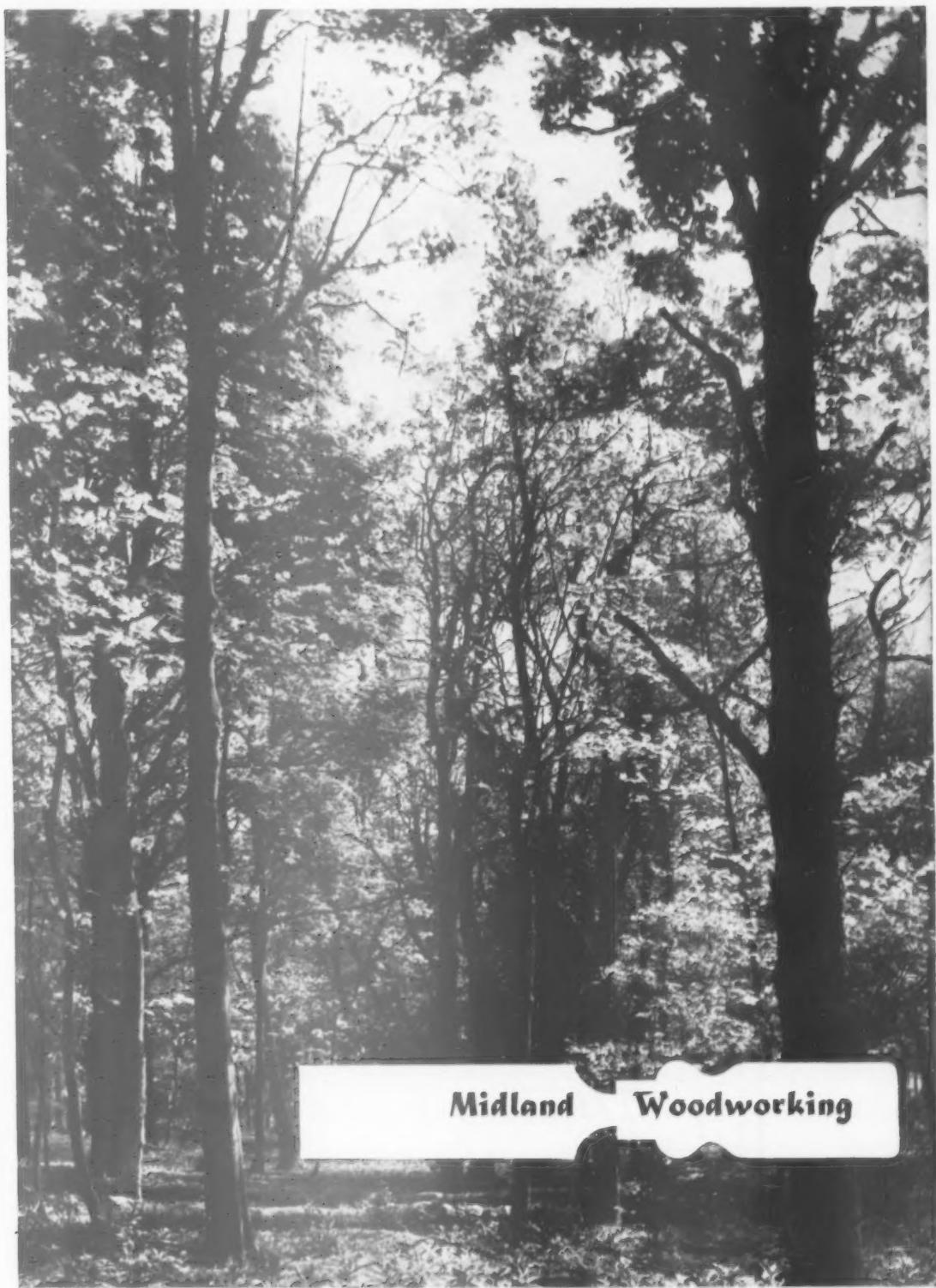
We
put your
clients
paint
wise!

Here is a Blundell product which helps to off-set the high cost of labour and thereby brighten the general picture. PAMMASTIC plastic emulsion coating cuts costs because it . . . requires no primer or undercoat . . . is as quick and easy to apply as distemper . . . dries in under two hours—enabling the second coat to be applied without delay . . . takes only two coats to cover the most contrasting surfaces. What's more; Pammastic cuts labour maintenance costs too, for it lasts indefinitely. For a brilliant enamel or soft eggshell enamel finish, the recommended complementaries to Pammastic are Blundell's Pammel and Pammellette.

We've always stressed that there's more to reading an estimate than looking at the Sum Total at the bottom. Good workmanship and good paint cost good money—but, seen in the right perspective and employed in the right way, they actually *save* in the end. Painting the true picture for the man who ultimately pays the bill is one of the ways in which the Blundell organisation help themselves by helping *you*. A client pre-conditioned to paint wisdom, is a better client for you—and for Blundell Paints. It's a big educational job—and the whole Blundell advertising strategy has been designed to do it.

BLUNDELL PAINTS

BLUNDELL, SPENCE & CO. LTD • MAKERS OF PAINTS SINCE 1811 • 9 UPPER THAMES ST. • LONDON • E.C.4 & HULL.
And at Bristol, Glasgow, Liverpool, Newcastle, West Bromwich, Bombay and Sydney. Associated Company at Valparaiso.



THE MIDLAND WOODWORKING COMPANY LTD. • MELTON MOWBRAY

Specialists in high-class joinery for the Building Trade



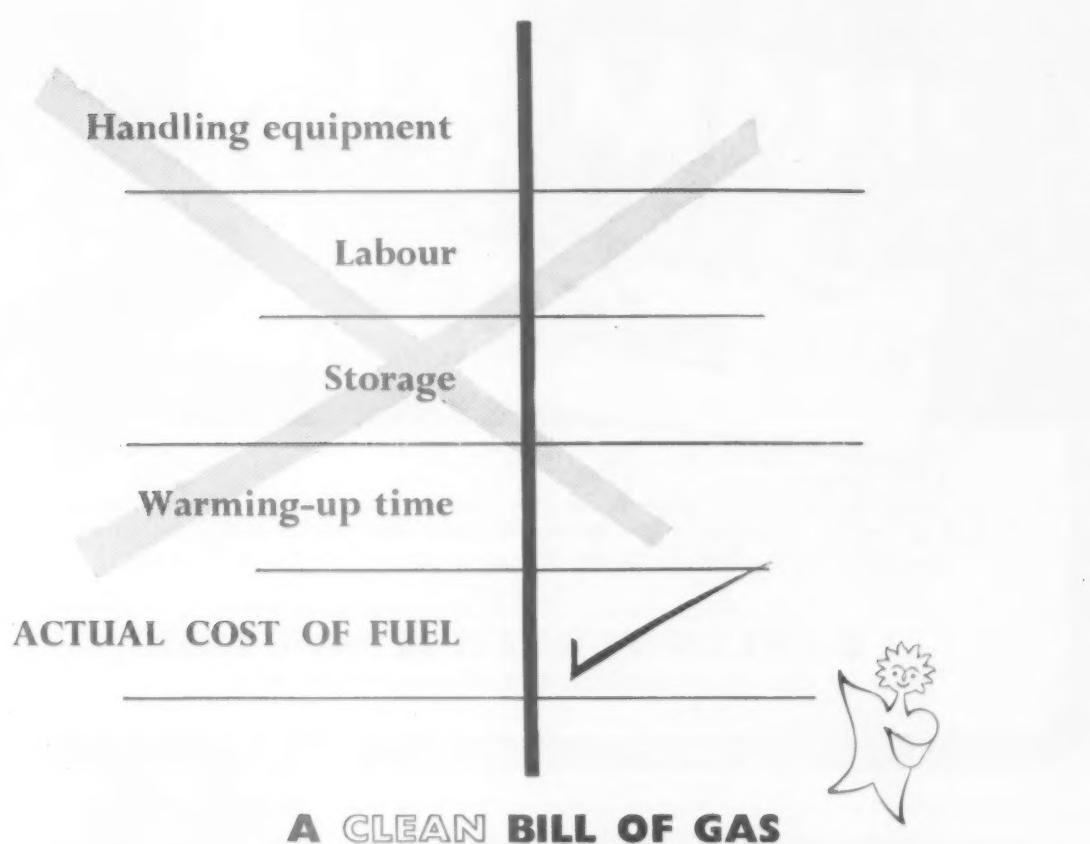
Sundeala

The British Made
Building Boards of
Quality and
Experience

THEY ARE MADE TO LAST

SUNDEALA BOARD CO. LIMITED

Head Office : ALDWYCH HOUSE, LONDON, W.C.2 Tel : Chancery 8159
Works : SUNBURY-ON-THAMES
Glasgow : BALTIC CHAMBERS, 50 WELLINGTON ST, C.2
Newcastle : NORTHUMBRIA HOUSE, PORTLAND TERRACE, 2



When you pay for gas, you pay for fuel, clean and simple. There are no extras to take into account, no storage or handling costs, no stokers to be paid, little in the way of maintenance overheads. Gas is quick to heat, easy to control and flexible in its application. Its calorific value is constant. There is no anxiety about what the next delivery will be like (or whether it will arrive) because gas delivery is also constant, a stream of latent, reliable heat going right to the point where it is required. There are many instances in which the specialist advice of the gas industry could ensure better results for the money spent on fuel.



What does 'not knowing' cost?

THE COST of 'not knowing' about how gas can serve you can only be measured by the specialists at your Area Gas Board. Their services are free. To solve your problem, they can draw upon the resources of the whole Gas Industry. If you would like the latest information about gas, get your secretary to fill in these details (or pin this advertisement to your letter heading) and send to your Area Gas Board.

The Gas Council, 1, Grosvenor Place, London, S.W.1

NAME OF FIRM.....

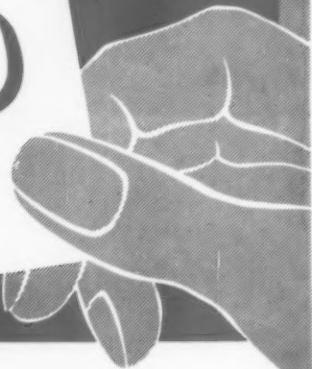
ADDRESS.....

WE NEED HEAT FOR..... 67

GC. GSB

The Gas Industry makes the fullest use of the nation's coal

Glynto ENAMEL



An enamel that has won a place in the front rank of decorative and protective finishes. Made in a variety of attractive shades, this enamel gives a superlative finish of lasting character. Specified by leading architects all over the country where a perfect job is the objective.

Write for descriptive literature and colour cards to the sole manufacturers :

CHARLES TURNER & SON LTD.

BLOOMSBURY HOUSE, 165 HIGH HOLBORN, LONDON, W.C.1.



A section of the rebuilt warehouse, No. 16, at Messrs. Butler's Wharf, Ltd., London, recently featured in MECHANICAL HANDLING. Four of the many handling facilities described can be seen—the control cabin at the wall corner; two rising platforms (one at lower right) and the crane at the far corner.

MECHANICAL AIDS TO PRODUCTIVITY FOR EVERY INDUSTRY ... large-scale or small

Executives in the building industry find MECHANICAL HANDLING an invaluable source of information on the use of mechanical systems. Articles and illustrations show in detail how large contractors, and comparatively small ones, have used various applications of the latest mechanical handling methods to step up production and reduce human fatigue, either in the actual construction work or as a part of the architectural design of the building.

MECHANICAL HANDLING is the only British journal devoted entirely to the subject of mechanical aids to productivity. It caters for every type of industry, describing methods which may well be applied to your contracts, resulting in an increase of output—without adding to working costs.

Read MECHANICAL HANDLING every month and be fully informed. Post this coupon to obtain the current issue.

TO:

ABN.5.

MECHANICAL HANDLING

DORSET HOUSE • STAMFORD STREET • LONDON • S.E.1

Please enter my name as a subscriber for the next 12 issues. I enclose remittance value £1 15s. (U.S.A. \$5.50. Canada \$5.00).

Remittances from overseas should be made by money order or bank draft in sterling on London out of a registered account.

Name

Address

Date

POST THIS FORM TODAY

The

"PRIMATIC"

REGD.

PATENT APPLIED FOR

Automatic Indirect Cylinder

is Different

IT IS THE ONLY CYLINDER
WHOSE SELF-FEEDING PRIMARY
DOES NOT CONTAMINATE THE
SECONDARY WATER.
MAXIMUM EFFICIENCY

FEEDS
IT'S OWN
PRIMARY
WITHOUT
MIXING

STEEL
RADIATORS
CAN BE USED

RADIATOR WATER
CANNOT CONTAMINATE
SECONDARY WATER

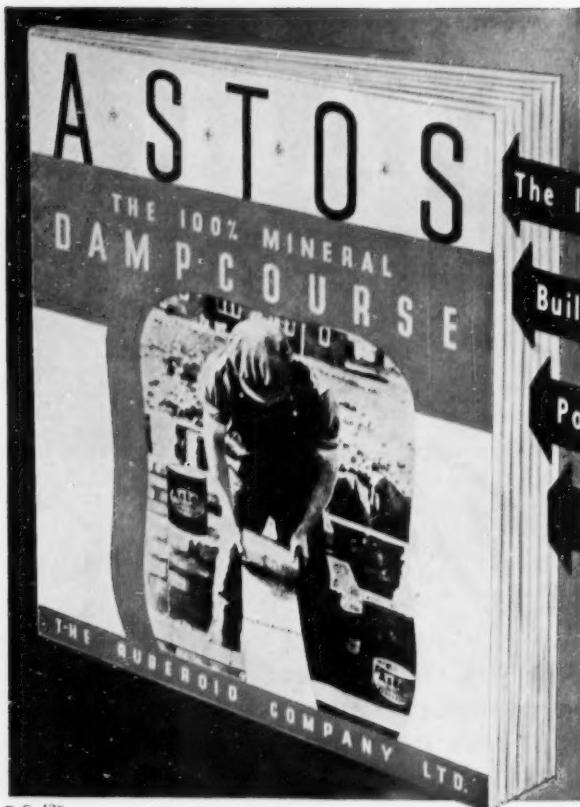
NO
LIMING UP
IN
BOILER

THE "PRIMATIC" HAS "BUILT-IN"
SPACE FOR PRIMARY EXPANSION

Passed by LEADING WATER AUTHORITIES
for use in their areas

COMPLIES WITH BSS.699.1951

MADE ONLY BY
RANGE BOILERS LTD.
(AND SUBSIDIARY COMPANIES)
STALYBRIDGE · CHESHIRE



D.C. 126

THE RUBEROID COMPANY LIMITED, 94, COMMONWEALTH HOUSE, NEW OXFORD STREET, LONDON, W.C.1.

INFORMATION

of interest to all concerned with
modern methods of building construction

All the facts you need to guide you in the choice—and use—
of the correct dampcourse for any building or
site condition are contained in this
handy reference book.

The Indestructibility of 'ASTOS' Dampcourse
Building Research Station Tests, Grades, etc.
Positive Identification of 'ASTOS' on Site
Information Sheets, Uses of 'ASTOS'

Have you
had your copy?

This useful Ruberoid publication is freely
available to everyone engaged in a professional
or executive capacity in the building industry. We
shall be pleased to send you your copy on request.



ESTATE SLIDING DOOR GEAR

ELLARD "Estate" Sliding Door Gear has again been specified for a
large housing estate: the People's Houses, Canterbury, Kent.
"Estate" Sliding Door Gear offers maximum economy in use of space.
For easy access and efficient action, garage doors should be fitted with
ELLARD "Radial" Sliding Door Gear. The illustration below shows a
typical domestic garage with sliding doors running on ELLARD
"Radial" Door Gear

ELLARD

RADIAL

ELLARD Sliding Door Gear has been specified for flats and housing schemes by: London County Council; Canterbury and Peterborough Corporations; Eston, Mexborough, Rushden, Sawbridgeworth and Wellingborough U.D.C.s; Easington and Sedgfield R.D.C.s; and for British Railways Housing Estates, Southall; Coronation Bungalows, South Shields; Kytes Settlement Estate, Watford; Newton Aycliffe and Stevenage New Towns.

CLARKE ELLARD ENGINEERING CO. LTD.
Works Road, Letchworth, Herts.

Tel.: 6134



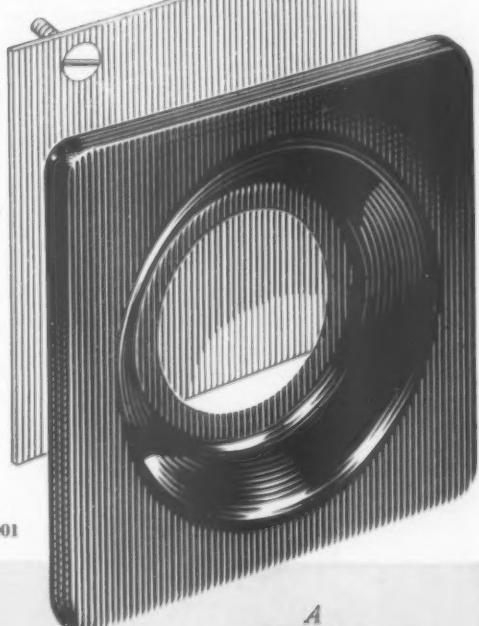
B.M.J.



Packed
for the job!

No time lost waiting for components to complete the switch units, no necessity to dismantle before fixing. The new G.E.C. pack for the Surface "Mutac" Switch Unit is just what you should order for any job for quick efficient installation and where quality at the right price is your target.

The new pack contains a fully welded pressed steel box with $\frac{1}{2}$ inch E.T. Spout Entry and a $\frac{3}{4}$ inch Knockout for through conduit entry, and the Flush 5 amp. S.P. "Mutac" A.C. Switch has a serrated ring to fix the pressed steel P.D. cover, two switch fixing screws are fixed in a cardboard insert.



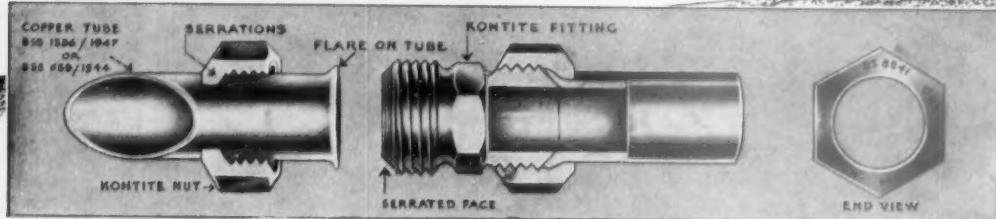
MUTAC

A.C. ONE GANG SWITCH UNIT

A
G.E.C.
Product

THE GENERAL ELECTRIC CO. LTD · MAGNET HOUSE · KINGSWAY · LONDON · W.C.2

Reduced CORROSION means increased efficiency!



Kontite

UNDERGROUND FITTINGS

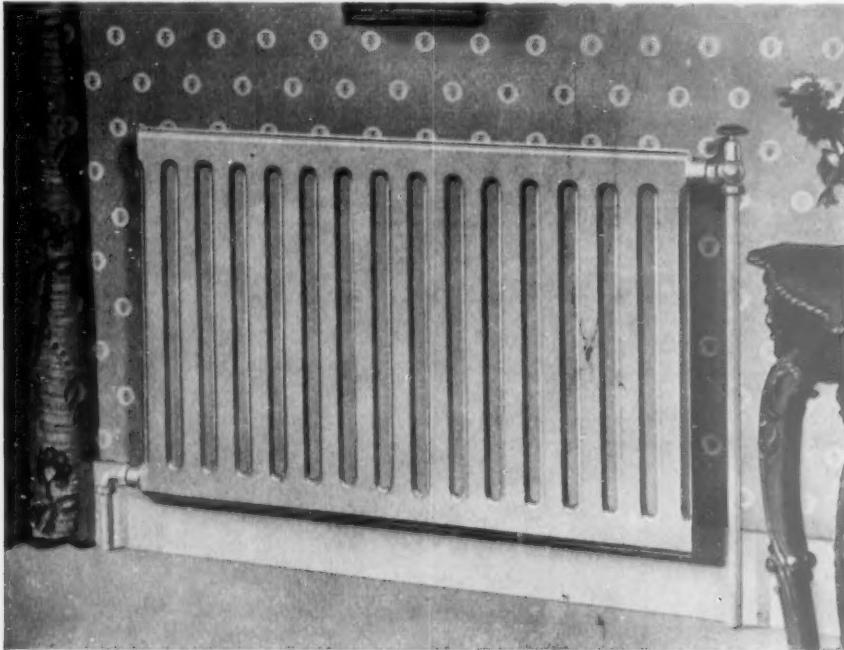
KAY & COMPANY (ENGINEERS) LTD., BOLTON BRASS WORKS, BOLTON.
Tel: Bolton 197

LONDON OFFICE: 36 Victoria St., S.W.1

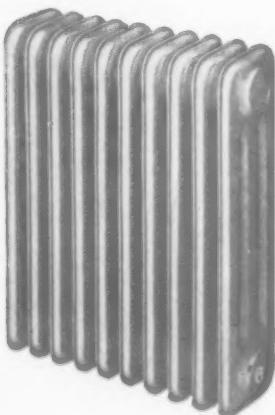
Grams: "Kontite", Bolton.
Tel: ABBEY 2144.

dm KB.103

- All bodies and nuts of Kontite Underground Fittings are made of GUNMETAL.
- Serrated end of the fitting body bites into the tube, giving increased strength to the joint.
- All fittings are of full bore, leaving the waterway unrestricted.
- Ball and socket effect allows for limited misalignment between tube and fitting before tightening. Tests prove that the joint is stronger than the tube itself.



LIGHT IN WEIGHT.
EASY TO PAINT
AND CLEAN.
ECONOMICAL TO FIX.
COST LESS
PER SQUARE FOOT.
MAXIMUM
FUEL ECONOMY.
IMMEDIATE DELIVERY.
FROST PROOF.



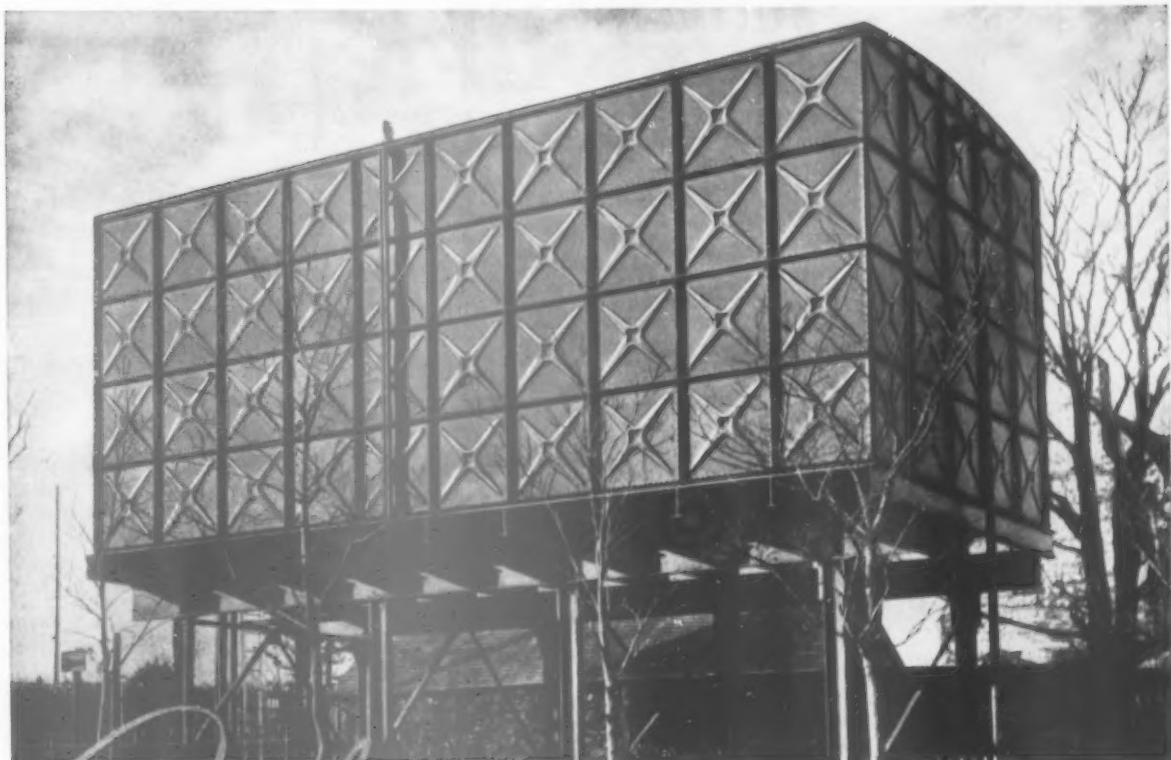
Specify GULF LONG LIFE RADIATORS

Gulf long life Radiators are available in a wide range of Column and Wall Panel types, in any length and in curved and angled form. Gulf specialise in producing radiators for unusual and exacting requirements. Ask for our latest catalogue.

GULF RADIATORS LTD.

Penarth Road, Cardiff. Tel: 20591/2
London Office and Showrooms, 229 Regent Street, London, W.I.

Tel: REGent 1051/6.



Braithwaite

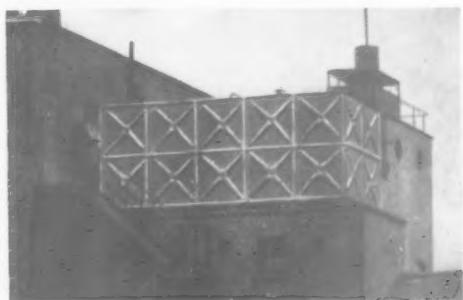
PRESSED STEEL SECTIONAL TANKS

rapidly constructed and easily enlarged ;
space saving and flexible in application ;
adaptable to the most difficult sites.

SECTIONAL STEEL TANKS provide the simplest and most effective solution to the problem of storage capacity for water, fuel oil and other liquids. Readily adaptable to siting conditions and flexible in application, the pressed steel sectional unit method of tank construction provides economical storage capacities from 400 gallons upwards.

Complete technical data will be forwarded on request, and, if you can provide a brief outline of your particular problem, we shall be only too pleased to send details of similar installations.

INDUSTRIAL PLANT DEPARTMENT
are suppliers of
TANKS, BOILERS, CHEMICAL PLANT,
LADDERS and SCAFFOLDING and other
items of static plant and equipment.

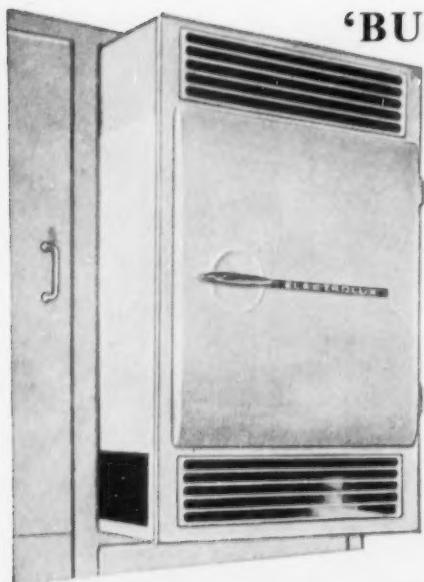


SELLING AGENTS

THOS. W. WARD LTD

HEAD OFFICE : ALBION WORKS, SHEFFIELD
LONDON OFFICE : BRETTENHAM HOUSE, LANCASTER PLACE, STRAND, W.C.2





'BUILT-IN' Electrolux

Silent REFRIGERATORS

NOW READILY AVAILABLE
for

ALL NEW HOUSING (Private and Local Authority)
KITCHEN MODERNISATIONS • CONVERSIONS

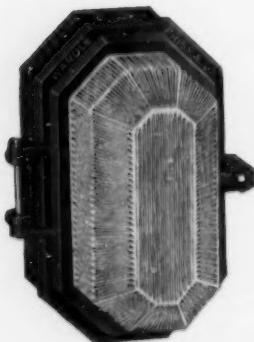
Electrolux
Excells

in easy installation...with all these added advantages

- No machinery — no moving parts to wear out.
- No vibration.
- No interference with Radio or T.V.
- Permanent Silence.
- Renowned for Reliability.
- 5-Year-Guarantee on the Silent Cooling Unit.

Architects and Builders are invited to write for full particulars to Contracts Department:—
ELECTROLUX LTD • 153-5 REGENT STREET • LONDON, W.I • Tel: REGENT 7252 (9 lines) • Works: Luton, Beds.
royds

For Every Situation...



PRISMALUX

Directional Lighting Units

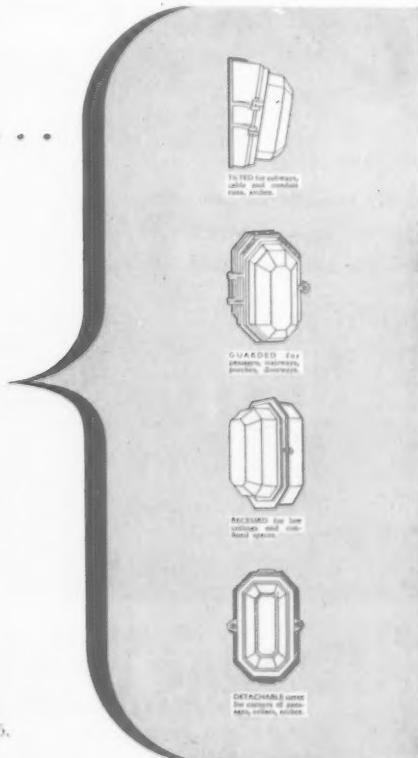
Enamelled or galvanised finishes. Choice of seven inlet points. Obtainable from all leading stockists or direct from the works where "Maxheat" oval tubular electric heaters, "Worksite" reflectors and Wardle floodlights are made.

★ PRISMALUX COMMANDS THE WORLD'S LARGEST SALE

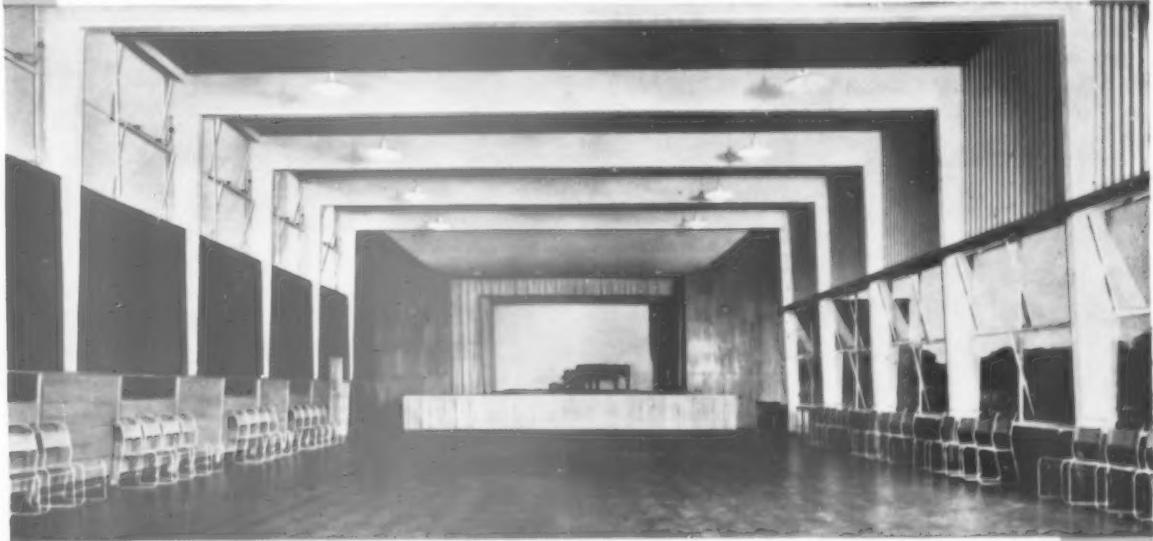
The

Wardle

Please send for details to
Engineering Co. Ltd., Old Trafford, Manchester, 16.



The widening scope of Asbestos-Cement



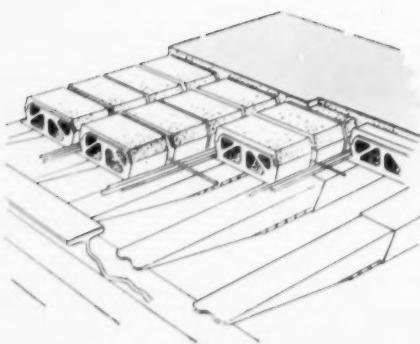
This photograph of the Assembly Hall at Upholland Grammar School, Nr. Wigan, shows the tasteful effect which can be obtained when "EVERITE" "BIGSIX" Asbestos-Cement Corrugated Sheets are used for interior wall treatment.

Architects : Messrs. Yorke, Rosenberg & Mardall.

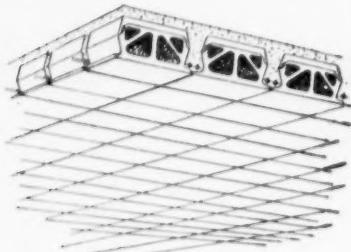
County Architect : G. Noel Hill, F.R.I.B.A., M.T.P.I.

"EVERITE"
Asbestos-Cement
"BIGSIX"
CORRUGATED SHEETS

TURNERS ASBESTOS CEMENT CO LTD
A MEMBER OF THE TURNER & NEWALL ORGANISATION
TRAFFORD PARK MANCHESTER 17



Showing Two-way Reinforcement and Hollow Concrete Blocks laid on Trianco Telescopic Centers.

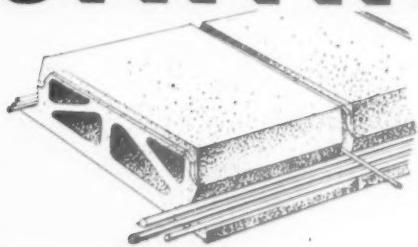


Showing uniform concrete soffit. Obtained without use of slip tiles.

SMITH'S FIREPROOF FLOORS LTD., IMBER COURT, EAST MOLESEY, SURREY



SMITH'S



2 WAY REINFORCED FIREPROOF FLOORS

The Two-way Reinforced Floor for distribution of point loads with efficiency and economy employing the original system of steel Telescopic Centers.

Midland Associated Company & Licensees
PARKFIELD CONCRETE PRODUCTS CO. LTD.,
St. Peter's Road,
NETHERTON. 'Phone: Dudley 4315.

Emberbrook 3300 (4 lines)

CASTEX for modern interiors
and exteriors

*ACTUAL SIZE
of the WIDE REED
design.*

CASTEX
reeded
hardboard

Durable, hard-surfaced "CASTEX" is hardboard . . . PLUS. Its hard, chestnut fibres are compressed into a really close-textured board which offers an excellent surface for paint, enamel, varnish and cellulose finishes, and which is ideal for natural clear polishing.

It is cleanly and easily worked with ordinary carpenter's tools; can be fixed by normal woodworking methods, and its fine, smooth surface will adapt itself to curvatures as easily as it will to flat areas. Its fine clean-cut edges, too, meet perfectly without need for cover strips or joint mouldings.

"CASTEX," of $\frac{1}{8}$ " (3.5 mm.) standard thickness, is available in INTERIOR & EXTERIOR grades, and in the following designs:

- * NARROW REED * WIDE REED *
- * FLUTED * CHECKED *

Standard size: 9' 8" \times 4' 0". Check pattern: 10' 0" \times 4' 0".

J. EIDELMAN
28 BISHOPSGATE, LONDON, EC2.
LONDON WALL 6656

"CASTEX" will flameproof up to standard required by Local Councils.



COLOUR IN ROOFING

New Factory at Crawley, Sussex, for
A.P.V. Co., Ltd., designed by W. S. Atkins
& Partners, London and roofed with
Briggs Bitumetal, The Modern Develop-
ment in Aluminium.

Roofs need no longer be laid in dull drab uninteresting finishes. Briggs Mineral Surfaced Roofings provide a range of attractive colours, each colour permanent and unfading, obtained from crushed natural minerals unaffected by time and weather.

This large modern factory, where roofing security is an important factor, is covered with a cap sheet of Green Mineral which harmonises pleasantly with surroundings.

Ask our nearest Area Manager for the latest technical details of Mineral Surfaced Roofings, adaptable for laying on any deck.



WILLIAM BRIGGS & SONS LTD

London, Vauxhall Grove, S.W.8 Regd. Office Dundee

OFFICES & DEPOTS ALSO AT ABERDEEN • BELFAST • BRISTOL
EDINBURGH • GLASGOW • LEICESTER • LIVERPOOL • NORWICH

Contemporary-style American bar and snack-bar



Annex at the Eccleston Hotel, Victoria, London

Combination cocktail and snack-bar in natural waxed mahogany and sycamore, with padded and studded front. Undercounter and backfittings have lockable space for food and drink storage, refrigeration and stainless steel wash-up. Sycamore display cabinets have sliding glass doors and mirror backs. General colour scheme, with contrasting walls, is black, grey and red. The whole was carried out by Gaskell & Chambers Ltd.



BRITAIN'S BIGGEST BAR FITTERS

Member of the Allied Brewery Traders' Association

- **HEAD OFFICE:** DALEX WORKS, COLESHILL STREET, BIRMINGHAM, 4.
- **LONDON OFFICE:** 109-115, BLACKFRIARS ROAD, S.E.1.

Branches:

Bristol · Cardiff · Hanley · Leeds · Liverpool · Manchester · Newcastle-on-Tyne · Nottingham · Portsmouth · Preston · Sheffield · Edinburgh · Glasgow

Vol. 205 No. 14

THE

ARCHITECT & BUILDING NEWS

8 April, 1954

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. Od. post paid: U.S.A. and Canada \$9.00.

Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1
Telephone : WATERLOO 3333 (60 lines).
Telegrams : "ARCHITONIA, SEDIST, LONDON."

Branch Offices : Coventry : 8-10 Corporation Street ; Birmingham : King Edward House, New Street ;
Manchester : 260 Deansgate. Tel : Blackfriars 4412 (3 lines), Deansgate 3595 (2 lines) ; Glasgow : 268 Renfield Street.

PLAYGROUNDS FOR BLOCKS OF FLATS

IN April 1952 the Grounds and Layout Committee of the National Playing Fields Association set up a technical committee on Children's Playgrounds under the chairmanship of Sir George Pepler to study the problem of playground provision generally, and in particular to collect information on playgrounds for blocks of flats for M.O.H. & L.G. In a report* published recently the N.P.F.A. expresses deep concern at the picture revealed as the result of this investigation, and hopes that it will be obligatory in future for all new schemes to be designed to include adequate playground provision in accordance with the report's recommendations. It is suggested that a sufficient sum should be included in the estimates for this purpose. The report should be acquired by every architect, committee member and housing official, who will want to know what is meant by "adequate" playground provision in order to estimate probable cost.

The arguments in the report (which include an invaluable appendix by Miss Joan Allen, a daughter of Lady Allen of Hurtwood, in the form of a survey into playgrounds around London flats) will be backed up by the touring exhibition on Children's Play Areas which has been designed by Mr. Gordon Logie, A.R.I.B.A., A.M.T.P.I., for the Housing Centre, and sponsored by the N.P.F.A., which will be on view at the H.C. until Easter, after which it is hoped that local authorities and voluntary societies will book it for local showing. The exhibition is made up of screens of enlarged photographs which Mr. Logie

has collected from many sources, both British and Foreign, which put to shame most of our play areas. They include many different types, representing a wide range of treatment of terrain and vary from expensive down to extremely economical solutions.

Perhaps the first requirement for anyone concerned with play areas is imagination. The point that impressed Miss Allen most vividly as she went round London playgrounds was the "lamentable lack of imagination that had been shown in planning the open spaces round the blocks." The charming Housing Centre exhibition may appeal principally to the converted but in conjunction with the N.P.F.A. report should do a great deal to overcome resistance based on more "practical" objections. And, of course, it is true that local authorities have to look at the question from many angles, not only of cost and upkeep, but of insurance against accidents and wilful destruction.

It is here that the experience of architects who have made imaginative provision for children's needs in the way of scooter tracks, adventure playgrounds and informal tree-and-grass areas, can be useful. Later this year a conference is to be held at County Hall, and this may well help to restore to its proper place in society the provision for children's needs.

In the past, slum children played dirtily but happily in their alleys, with hoops or tops as the season demanded, and country children roamed the lanes and climbed trees. All unself-consciously. To-day, everything is perhaps too self-conscious, but there is more skill and sympathetic understanding available than ever before. Let us, then, use it, not just here and there, but throughout the whole country.

* "Playgrounds for Blocks of Flats." A Report prepared by the National Playing Fields Association for the Ministry of Housing and Local Government. Obtainable from the N.P.F.A., 71 Eccleston Square, London, S.W.1. Price 2/6.

EVENTS AND COMMENTS

WINDSOR PLEASURE GARDENS

The public enquiry on the proposed Windsor Pleasure Gardens was in full blast last week and, judging from reports which I have seen, the case against the scheme is very strong. The design of the gardens is in capable hands, and several household names are included among the architects to be employed; this fact should not, however, be allowed to cloud the main issue, which is surely for the people of Windsor alone to decide, namely, whether the pleasure gardens would make Windsor a pleasanter place to live in or not. The word amenity is much overworked, and can be made to mean almost anything when used by either side in such an argument. The promoters doubtless regard their scheme as adding to the amenities of the town. Those against it regard the gardens as a great threat to the amenities.

Sir Owen Morshead, the Queen's Librarian, appearing in his private capacity, hit the nail on the head when he said that he could not help thinking that had it not been for the presence of Windsor Castle the promoters would not have chosen Windsor for the site of the gardens. The promoters were availing themselves quite legitimately of the drawing power of the ancient and historic castle in order to pursue their commercial ends.

Sir Owen went on to say that he thought that had it not been for the money inducements offered the Windsor Town Council would have had nothing to do with the scheme.

I find myself in complete agreement with Sir Owen and also with the witness who said that in his opinion the scheme would be far more suitable for Maidenhead than Windsor.

EMBANKMENT PLANTING

My picture shows the spine which has been laid along the Victoria Embankment now that the road has been remade after taking up the trams. It looks rather ham-fisted at present, but when the bushes, hardly visible



in the picture, grow and are clipped the result should be quite pleasant.

WOOLTON STONE

According to a Liverpool report the fabric of St. Paul's Church, Princes Park has seriously deteriorated during the last twenty-five years. The church was built just over a hundred years ago of Woolton stone. Sir Giles Gilbert Scott is reported to have chosen this stone for the cathedral after a visit to St. Paul's. The deterioration of St. Paul's is said to be due to increased atmospheric pollution. I hope that this does not mean that we shall see the launching of a Liverpool Cathedral Restoration Fund before the building is finished.

GARAGE SITES FOR COUNCIL HOUSE TENANTS

From time to time one hears of rows over the provision of garage sites for the tenants of council houses. These rows are usually political and seem to have nothing to do with the more important point of looking ahead. The number of cars on the road is likely to increase, and if all goes well more people will be able to afford them as the years go on. Unless street parking is to become accepted as the normal overnight accommodation for cars, councils must make some sort of provision for garages. But it seems to me that the ground rent payable by the tenants who build their own garages on council sites should bear a direct relation to the amount that the council has spent. For goodness sake do not let us have garages on the Welfare State as well as everything else.

MANCHESTER UNIVERSITY

I hear that students of architecture and town planning in the University of Manchester are displeased with the architectural development of the University. Although I have not seen the plans I feel sure that they are right. On this sort of point students usually are right. I am told that they propose to do something about it. I hope they will keep me informed.

ACCIDENT WITH PRESTRESSED CONCRETE BEAM

A most unfortunate accident involving the death of a man occurred recently at Lowestoft when a prestressed concrete beam 76ft 3in long collapsed while being fixed in position. The beam was one of several being used as roofing members in the construction of a shipyard. At the inquest on the man a verdict of accidental death was returned. No direct evidence as to why the beam broke was forthcoming. Apparently the beam was left suspended by slings attached to two bolts while the erectors had a tea break. Afterwards one end was secured to an upright with bolts by a witness who then went down to get a hammer with which to loosen the bolt holding one of the slings, the man who was killed was doing a similar job at the other end of the beam. While the first man was going down he heard a sharp crack and saw the beam crumbling at its centre. The other man fell with the beam which folded up into a V and completely disintegrated when it hit the ground. A rigger gave evidence that during erection the crane slings were tightened in an effort to free a plate. The jib was lifted and the centre of the beam cracked and folded.



First prize: Aidron Duckworth



Second prize: David Davenport

The British Rubber Development Board sponsored a competition the aim of which was to interest student designers in working out practical ideas for incorporating latex foam in various kinds of seating. Ninety-seven competitors submitted designs and the assessors considered the competitors had shown themselves to be familiar with the uses of latex foam for upholstery but that there was a lack of appreciation of the diverse possibilities it offered to the designer. It was noted that almost all architectural students used metal rods as the basic framework of their designs. Some designs involved so much steel that although the chairs appeared to be light it would have taken two strong men to lift them. In other instances not enough thought had been given to the wearing of fabrics and upholstery through rubbing against metal members.

The prizewinners were, first: A. Duckworth of the Royal College of Art; second: D. Davenport, High Wycombe College of Further Education; third: A. Tilbury, Kingston School of Art, and fourth, S. Dysthe, Royal College of Art.

This was a very nasty accident quite apart from the fact that a man was killed with it. It is most important for the future of P.R.C. that the true cause of it should be discovered. No doubt the manufacturers of the beam are as anxious as anyone else for this to be determined. Perhaps the Pre-Stressed Concrete Development Group will hold an inquiry. Let us hope that it will and then give full publicity to its report.

ARCHITECTS AND THE BOAT RACE

There is nothing which divides this country so sharply into two camps as the boat race. As a spectacle seen from a point on the bank it is not wildly exciting nor splendidly impressive. Rather are the spectators filled with sympathy for the 16 chaps with bursting hearts and the two faced



Third prize: Alan H. Tilbury

with making desperate decisions. I do not know how many budding architects have rowed in the 100 races but many thousands of qualified ones watch it each year, or so it seems to me. There are several reasons for this. In the first place architects tend to live where there are nice houses and the banks of the Thames between Putney and Mortlake provide many of these. Every house-owner on or near the course gives a party, and we all know that architects stick together. Again, painters and sculptors live by the river in fairly large numbers; they, too, give boat-race parties. Heating engineers, builders' merchants and others connected with the industry have riverside wharfs and their boat-race parties, to which many architects are invited, are things to be remembered.

A B N E R

NEWS OF THE WEEK

Sighthill Church Competition

In their report the assessors, Professor Robert Matthew, Mr. H. Taylor, A.R.I.B.A., and Professor J. G. Riddell, D.D., said that in their opinion no entry satisfactorily reconciled architectural quality with economy in cost. Of 83 designs submitted, 20 had been selected for final consideration, but only a few came within 10 per cent of the £45,000 allowed for the cost of erection of the church. They therefore recommended to the promoters that the five prize-winners, together with eight other entrants whose designs had architectural quality (Mr. Basil Spence was among these) should be invited to review their schemes and re-submit them. If then a design of sufficient architectural merit capable of being built for the estimated cost (in the assessors' opinion the accommodation required in the conditions could be provided within the cost limit), the church authorities could select an architect for carrying out the work. The exhibition of the competition entries was opened by Mr. Leslie G. MacDougall, P.R.I.A.S., in the Church of Scotland offices, Edinburgh. Mr. MacDougall said that he did not think our young designers were completely *au fait* with modern tendencies and prices. He thought that architects should abandon this "coffin tendency" as far as the Church of Scotland was concerned. The 1st and 2nd designs are illustrated on pages 414-416.

Narrow Frontage Houses

The City of Birmingham Corporation, in collaboration with the Ministry of Housing and Local Government is to erect a number of experimental houses aiming at a reduction in building costs and erection time. Three-bedroom houses with a frontage of 13ft 6in will be built on a site in Queens Street, Aston, and others with an 18ft frontage at Staplehall Farm Estate, West Heath. The accommodation will be similar to the average 20ft frontage houses built by the Corporation.

Housing Progress, February

The number of permanent houses completed in February in Gt. Britain during the month of February was 19,786, compared with 20,118 during the same period in 1953. The drop is attributed to bad building weather.

New Presidents

At the annual general meeting of the Society of Industrial Artists on March 27, Mr. Misha Black, O.B.E., was elected president of the Society for the coming year.

At the annual general meeting of the Royal Society of British Sculptors held on March 23, Mr. Gilbert Ledward, R.A., F.R.B.S., was elected president in place of Mr. William C. H. King, who retired after serving as president for five years.

PARTNERSHIP

Mr. George Fairweather F.R.I.B.A. has taken into partnership Mr. Eric Rheinberg, A.R.I.B.A., A.A.Dip. (Hons) and Mr. Geoffrey L. Cannon, A.R.I.B.A. The firm will in future practice under the style of George Fairweather and Partners, 28/30, Wigmore Street, London, W.1. (Telephone Welbeck 5489-90.)

RETIREMENTS

Mr. C. Cowles-Voysey, F.R.I.B.A., is retiring from practice. His practice will be carried on by John Brandon-Jones, Robert Ashton and John Broadbent, Associates R.I.B.A., with whom he has been associated in the past. The name of the firm will be Brandon-Jones, Ashton & Broadbent, and they will practise from 2 Redington Rd., Hampstead, N.W.3. Telephone Hampstead 4297.

Mr. J. L. Pickering, I.R.I.B.A., A.M.I.S.E., Architect to Bermondsey M.B.C. is retiring at the age of 54 on account of ill health, after 29 years service. He is to receive a lump sum of £1,140, and an annual allowance of £427.

COMING EVENTS

The Ecclesiastical Society

April 12 at 6.30 p.m. "Architectural Impressions of Italy and France after 60 Years," by Arthur E. Henderson, F.S.A., R.B.A., F.R.I.B.A. (Ret.), at the Hall of the College of Preceptors, 2 Bloomsbury Square, W.C.1.

Royal Institute of British Architects

April 13 at 6 p.m. "The Planning of Lift Installations in Commercial Buildings," by P. T. Fletcher, B.Sc. (Eng.), M.I.Mech.E., at 66 Portland Place, W.1.

London Master Builders' Association

April 14 at 2 p.m. General Meeting of Area 1. Annual visit of the President, R. S. Williams, M.I.O.B. Luncheon at 1 p.m. at Derry & Tom's Restaurant, Kensington High Street, W.8.

The Royal Institution of Chartered Surveyors

April 14 at 6 p.m. "A New Approach to Single Price-Rate Approximate Estimating," by W. James, F.R.I.C.S., at 12 Great George Street, S.W.1.

Library Group Meeting

The next meeting of the R.I.B.A. Library Group will take place on Monday, April 12, 1954, at 6 p.m. at the Royal Institute of British Architects, 66, Portland Place, W.1.

The speaker at the meeting will be Mr. W. A. Eden, M.A., F.S.A., F.R.I.B.A., who will talk about Marble Hill House, Twickenham, and Roger Morris.

L.M.B.A.

The L.M.B.A. has circularized all its members calling their attention to the fact that a considerable number of boys leaving school at Easter will be seeking apprenticeship in the building industry. It is imperative therefore that there shall be available a sufficient number of vacancies with suitable employers so that the boys may be absorbed immediately and before they lose interest and accept employment in other industries.

All members are asked to stretch their resources to the limit in taking on new apprentices and to return a questionnaire showing the maximum numbers they can take in the various trades. A complete list of vacancies will then be circulated to the Schools of Building, Youth Employment Officers and others interested.

There is no more vital task for the building industry at the present time than the recruitment of adequate numbers of craftsmen, says the circular.

Mock Arbitration

In conjunction with the Institute of Arbitrators, the L.M.B.A. is staging a Mock Arbitration in the autumn. It is to be held on October 21 in the Henry Jarvis Hall of the R.I.B.A.

A similar event some two years ago was an overwhelming success, and, as applications for tickets were sufficient to have filled the hall some four times over, there have been many requests for a repeat performance. In addition to being good entertainment, the Mock Arbitration has considerable value in showing just how a real arbitration is carried out.

Cricket

At the annual general meeting of the L.M.B.A. Cricket Club, Mr. B. J. Garrett was elected captain in succession to Mr. George Parker, with Mr. A. F. Wallis as vice-captain. Mr. R. S. Williams, president of the L.M.B.A., was elected to the presidency of the club and Mr. J. D. Long was re-appointed hon. secretary and treasurer.

The following fixtures have been arranged for the 1954 season: May 6, L.M.B.A. v R.I.C.S. Cricket Club; May 25, L.M.B.A. v L.C.C. Architects' Club; June 3, L.M.B.A. v R.I.B.A. Cricket Club; June 18,

Careers Exhibition

At the Careers Exhibition organized by the St. Pancras Rotary Club at the Willis Hall, Prince of Wales Road, N.W.5, on March 24, 25 and 26, the building industry was represented by a stand arranged jointly by the London Master Builders' Association and the Northern Polytechnic, and designed by Mr. T. E. Scott, C.B.E., F.R.I.B.A., Hon. F.I.B.D., and the work was carried out by Messrs. Yeomans and Partners, Ltd.

IN PARLIAMENT

Home Timber Inquiry

The marketing problems of the home timber industry are to be investigated by a departmental committee set up by the Minister of Agriculture and the Secretary of State for Scotland. Sir Thomas Duggdale announced that the committee's terms of reference would be—"With the object of promoting confidence and stability, and bearing in mind both the output from Forestry Commission woodlands and the need to develop markets, to consider what measures might be taken within the home timber industry to improve the arrangements for marketing produce from privately owned woodlands." Mr. Hugh Watson, Deputy Keeper of the Signet, had accepted the chairmanship of the committee, and the names of the other members will be announced. (April 1.)

Employment Prospects

Mr. Osbourne asked the Minister of Housing and Local Government if he was satisfied there would be no widespread unemployment in the building industry when the council house building programme began to taper off; and if he would make a statement on the position. Mr. Marples, the Parliamentary Secretary, referred him to the statement of Government policy made on December 1, during the second reading debate on the Housing Repairs and Rents Bill, by the Minister of Works. In brief, the Government aimed at stabilizing the house-building programme at about 300,000 a year, which is 50 per cent above the 1951 level. In so far as this might release resources at present engaged on house-building, there was substantial building required for productive industry and agriculture, for work on existing houses, and for the many social needs so long restricted; and all of these required additional resources. (Mar. 30)

Planning Appeals

Mr. Irvine asked the Minister of Housing and Local Government what measures he is taking to shorten the time taken for decisions in planning appeals. Mr. Marples explained that there had been a large increase in the number of appeals during the past twelve months and this had inevitably led to some delay. To meet this situation, the Minister had increased the number of inspectors, and had made special arrangements in his Department to help speed up the reaching of decisions. He was watching the position carefully. (Mar. 30)

Bankside Fumes Assurance

Lord Derwent asked the Government whether the discharge of fumes from the Bankside power station was having any injurious effect on St. Paul's Cathedral. Lord Mancroft, Lord-in-Waiting, said that the power station was fitted with the most modern type of gas washing plant, and

its performance had been under constant observation since it began operating last July. A high degree of efficiency had been maintained in the extraction of sulphur-dioxide from the flue gases. He was advised that there was no reason to think that the small amount that was passed into the atmosphere from the power station had any harmful effect on St. Paul's Cathedral. If any evidence was advanced to the contrary the Government would be prepared to undertake the most immediate and searching investigations. He added that the power station emitted about 10 tons of fumes a month, compared with 150 tons emitted by the old station which it was designed to replace. (Mar. 30)

Decoration in Architecture

A proposal that not less than one and a half per cent of the cost of any building constructed under the authority of the Minister of Works should be allocated to artists for the purpose of decoration, "whether by mural painting, paintings, mosaics, sculpture, or other suitable medium," was made in the House of Lords on March 31, during discussion of the National Gallery and Tate Gallery Bill.

The suggestion was made by the Earl of Huntingdon, in the form of a proposed new clause, and as all artists might conceivably benefit if it were accepted, he declared a personal interest in it. His argument was that the private patrons of the last century had disappeared under the pressure of high taxation and limitation of income, and that their place should be taken by the big corporation, the local authority, and the Government. He commented that as the result of modern trends there had been a "wave" of rather bare architecture which called for decoration. Many architects did not realize what good decoration could do to improve a building. There had been a great deal of bad decoration, for which he thought the artist was to blame, because when called on to do a massive piece of outdoor decoration the artist was still thinking in terms of the oil painting on an easel. The artist had not got a grip on the architectural aspect. That was something which could be developed, but there was little opportunity for such development, and so he urged that the Government should give a lead to other big patrons.

Another painter, Lord Methuen, supporting the proposal, agreed that painters had become so used to the easel that they forgot that the mural was the oldest form of decoration. There was plenty of scope for murals if only architects used a little imagination to make use of artists and sculptors for this purpose.

The Earl of Selkirk, Paymaster-General, speaking for the Government, said the idea was not new, as a similar suggestion had been made by the R.I.B.A., although they were more modest and only wanted one-quarter

of one per cent. The Minister of Works was fully aware of the need that public buildings should be attractive in appearance, and that in large measure artists were dependent on the scope of the work which the Department provided. On a number of buildings erected since the war—for example, the Ministry of Agriculture in Whitehall Place, and the Whitehall Gardens building—work of this kind had been carried out, and his impression was that it was quite good. The new Colonial Office on the site of the old Westminster Hospital would also be adorned with sculpture and would have fine panelling fashioned from Colonial woods. It did not seem to be recognized by the Earl of Huntingdon that the architect was also an artist, and should be left free to decorate or not to decorate; and that applied also to the civil engineer, as was illustrated by Waterloo Bridge, which had little decoration and showed a high standard of engineering art. It was also difficult to distinguish sharply between the craftsman and the artist. Over the past three years the Ministry of Works had allocated £50,000 to the adornment of new buildings.

The Earl of Huntingdon, having achieved his purpose of drawing attention to the subject, acknowledged that it was not really appropriate to the Bill and withdrew his amendment.

R.I.B.A. Maintenance Scholarships in Architecture

The Royal Institute of British Architects offer for award in July, 1954, the following Maintenance Scholarships in Architecture, tenable from October 1, 1954:—

The Howe Green 4th and 5th year Maintenance Scholarship of £40 to enable students who have passed the Intermediate stage to complete an approved course at a School of Architecture recognized for exemption from the R.I.B.A. Final Examination.

One R.I.B.A. Houston Maintenance Scholarship of a maximum value of £125 per annum. It is available for any stage of training at a Recognized School of Architecture and is awarded in the first instance for one year. It is renewable from year to year.

The Houston Maintenance Scholarships are for the purpose of providing educational and maintenance allowances for the sons of architects and artists, who may be, or at the time of their death were, in impecunious circumstances, whether such architects or artists be alive or dead.)

The Hartley Hogarth Maintenance Scholarship to provide grants towards the fees for architectural study at a Recognized School of Architecture, is available to any student or students who produce satisfactory evidence of having been resident in the Borough of Keighley for a period of 10 years prior to October 1 of the year in which the application is made. Its value will be that of the fees of the School of Architecture selected.

The Artists' General Benevolent In-

C O R R E S P O N D E N C E

The Allied Societies

To the Editor of A. & B. N.

Sir,—Your contributor's article on the Allied Societies is timely. The Profession cannot hope to improve in status unless the individual members, old and young, are prepared to do more than pursue their activities in self-interested isolation.

The belief that regular payment of subscriptions to the Institute and "leave it to them—we pay" is pathetic. For this reason my only disagreement with your article lies in the very first sentence (not Mr. Taylor's, I note) "What benefit would there be in joining your Society?" Architects must begin to ask another question "What benefit can I be to my Society?" We really must move in to give what we can. Modesty, and Architects are notoriously modest, must not become an excuse for inertia.

Everyone from the Principal, Public or Private, harassed by Industrial difficulties and frustrated by administrative details, to the Student, School or Office trained, harassed by rejected Testimonies and stifled by the rare air of the Academy, can contribute to a healthy Society.

By turning up at meetings . . . you have no idea how delighted even the stars of the Profession are to see a reasonable audience, how rewarding your mere presence can be. By listening carefully, taking a few notes, and by screwing up your courage to express a thought. Chairmen of Allied Society meetings, please try to create a friendly atmosphere encouraging to discussion, but be firm with chatters. By coming

to the Annual General Meetings and taking some trouble to elect a good Council, a bad Council is elected by members who don't attend. By being willing to serve on Council or Committee, for goodness' sake don't be too primly modest or self-righteously "too busy." "Too modest," "too busy" are a bit too reminiscent of self-pity. We can't be too busy to look after our Profession, it is only enlightened self-interest.

And finally by paying your subscription. The individual amounts are not excessive, but together they make a fund which enables an executive to arrange activities; small exhibitions; finance members going to lecture to local Societies; purchase projectors; commission coloured slides; and offer generous hospitality to the great men of the Profession who are often more approachable than one would think, especially if approached in the right way. Told your aims, your desires for instruction—Societies should really take the trouble to be patrons of the lecturers and assume some of the responsibility for inspiring them to a theme; after all, no building can be designed without a good Client.

Having said all this and the Allied Societies done something, what about Portland Place?

In my short experience, the Council and Committee members of the Institute, its officials and, in particular, our London colleagues, on whom for obvious reasons a great deal of work falls and is cheerfully undertaken, all these have done and are doing us great service.

We could, however, do with more "royal visits" from the Institute. Not

stitution Maintenance Scholarship of a maximum of £125 per annum is available in the first instance for one year and renewable for two further periods of one year each.

(The Artists' General Benevolent Institution Maintenance Scholarship is open to orphans or sons or daughters of an architect in private practice or an artist. Applications for this Scholarship must be made by June 1, 1954, to the Secretary to the Board of Architectural Education, R.I.B.A., 66 Portland Place, London, W.1.)

The Scholarships are intended to enable promising students, whose parents or guardians have not the necessary means, to attend approved courses at the Schools of Architecture recognized for exemption from the R.I.B.A. examinations. Students already taking such a course are also eligible to apply for a Scholarship. The Scholarships are available only for students who are British subjects by birth or naturalization.

The value of the Scholarship, up to the limits stated, will depend on the financial circumstances of the parents or guardians of the candidate. The parents or guardians will be required to furnish particulars on the proper form of their financial position.

Applications for the Scholarships (in accordance with the regulations for applications) must be made to the Secretary to the Board of Architectural Education, R.I.B.A., 66 Portland Place, London, W.1. The closing date for the receipt of applications, duly completed, is June 29, 1954, except in the case of the Artists' General Benevolent Institution Maintenance Scholarship, the closing date for which is June 1, 1954. The awards will be announced towards the end of July, 1954.

R.I.B.A. Intermediate and Final Examinations

The Council of the R.I.B.A. have decided that as from July 1, 1954, candidates for the Intermediate and Final Examinations shall be required to have reached the minimum age of 19 and 21 respectively by the first day of the examination at which they present themselves.

This regulation supersedes the existing regulation whereby candidates were required to have reached the appropriate minimum age limit by the closing date announced for the receipt of applications for admission to the particular examination at which they wished to present themselves.

R.I.B.A. Final and Special Final Examinations: Relegated Candidates

The Council of the R.I.B.A. have decided that as from January 1, 1955, candidates who do not pass in at least two of the following subjects of Part 2—B1 (General Construction), B2 (Theory of Structures), C (Hygiene and Specialized Requirements of Building) and D (Specifications and the Properties and Uses of Building Materials) will be required to take those four subjects again at a subsequent sitting.



"Norway House", hostel for Norwegian students in University City, Paris, which was opened this week by M. Coty, the French President.



New concrete church in Freiburg, Southern Germany, which was opened on March 22.

simply on the occasion of an expensive dinner attended by doyens and dignitaries, sometimes boring, but at general meetings where a good speaker can help us to learn more about Architecture. I am sure every President of an Allied Society would be delighted to hand over his chair to our distinguished President or Senior Vice-President of the Institute, and every Secretary be glad to welcome that truly urbane ambassador "Bill" Spragg.

It needn't be often, it needn't take up too much time, though some thought and quite an amount of work would be involved, and until there is much more evidence that we are giving all we can to our Allied Societies we can hardly expect to attract Portland Place out to the Provinces.

The object is not necessarily immovable but our powers must be irresistible.

I am, etc.,
G. GRENFELL BAINES,
President,
Preston, Blackburn & District Society
of Architects.

British Architectural Guild

To the Editor of A. & B. N.

Sir,—Up to now we have refrained from replying to any of the comments made in the Press on the subject of the British Architectural Guild until the R.I.B.A. has had an opportunity to express its views.

Nevertheless, in the course of the critical observations made by Abner in your latest issue there is one point which in fairness demands elucidation. Abner refers to the fact that the Rules

of the Guild as at present constituted provide that the Council of the body shall consist of one-third members of the Incorporated Association of Architects and Surveyors and one-third members of the Royal Institute of British Architects.

The reason for this provision, however, was not a desire to give equality to the Incorporated Association of Architects and Surveyors but to ensure that the two professional bodies possessing corporate and non-corporate members were indirectly represented in the management of a new body which might otherwise be severed entirely from the steady influence of existing organizations.

In fact, the proportions are not as undemocratic as Abner implies. In the first place a very large number of I.A.S. architect members are members also of the Royal Institute of British Architects and of the one-third seats allocated to members of the I.A.S. it is possible that all their occupants might be members also of the Royal Institute. Secondly, the remaining one-third not specifically provided for would undoubtedly consist in the main of members of the Royal Institute and thus there would inevitably be a considerable majority of R.I.B.A. members on the Council of the Guild.

In any case, this Rule, and indeed all the Rules as at present formulated, can be very simply amended by Resolution carried by a two-thirds majority in Council.

I am, etc.,
RONALD ISTD,
Secretary,
The British Architectural Guild.

The A.B.T. and Architects

The following statement has been received from the Association of Building Technicians

In June, 1952, the Salaried and Official Architects' Committee of the R.I.B.A. appointed a Sub-Committee "to consider and advise on measures that might be taken to provide effective representation of salaried architects and architectural assistants in all negotiation affecting their conditions of service and salaries." Representatives of the Association met the Sub-Committee and a full discussion took place. The Association's representatives outlined the present position as regards representation in negotiations, examined the various types of organization which are, or could become, available to salaried architects and stated why, in their opinion, only the A.B.T. provides the basis for a successful solution to the problem within a measurable distance of time. The Association's representatives also stressed that the A.B.T. would be pleased to give careful consideration to any proposals the R.I.B.A. might care to put forward in order to make the A.B.T. more effective on behalf of salaried architects and architectural assistants.

The A.B.T., therefore, has made known its views to the Royal Institute, and we also have our official representative on the Council.

Anticipating the possibility of further consultation at some point with the R.I.B.A. the Executive Committee sought powers from the General Council at its meeting in November, 1953, "to consider revisions to the constitution of the A.B.T., to enter into discussion with the R.I.B.A. and other bodies, and if necessary to call a special General Meeting to consider changes of rules" and these powers were given.

Arising from that decision members have questioned what action is proposed by the Executive Committee.

In the view of the Executive Committee no useful action can be taken by the A.B.T. until the R.I.B.A. has completed its inquiries. If far-reaching reorganization was undertaken by the Association at this stage, it might well be found that the steps taken were not at all conducive to a solution of the problem in collaboration with the R.I.B.A., had only weakened the A.B.T. and further confused the situation.

It will be obvious that the position is complex and that is why the Association deplores the ill-advised formation of yet another organization—the British Architectural Guild—and we fully support the views expressed by the R.I.B.A. on this question.

Members can be assured that the Executive Committee will keep this matter constantly under review. The A.B.T. has always been a flexible organization and we are prepared to consider any proposals which might be made by other organizations or our own members in order to make the Association more effective on behalf of its members.

American News Letter—9

AN apartment in 860 or 880 Lake Shore Drive, Chicago, Mies Van der Rohe's two steel and glass towers on the edge of Lake Michigan, is an enviable spot for a number of reasons. It is in the heart of the city, within walking distance of the Loop and the fashionable shopping district around Michigan Avenue—although few people would consider the idea of walking—and it is in an area which has considerable social prestige, the so-called "Gold Coast" of Chicago. From the glass walls of 50 per cent of all living rooms the lake fills the entire view, an effect which is hard to imagine. The lake presents a spectacle which changes as constantly as the sea, also, the lakeside is almost the only cool place in Chicago during the heat of summer and so in addition to this visual aspect there is the very real advantage that residents returning home from the office can take a quiet swim before dinner in the hot weather. At weekends the whole length of the lakeside in front of the city is as colourful as Miami with bright costumes and the fashionable props of outdoor living and dining. Mies' buildings are part of this environment, an exciting mixture of lake and city, and offer opportunities for living in direct contact with it that have nothing to do with aesthetics.

To obtain an all-glass building Mies has imposed a certain discipline on the plan, although he claims that in the process nothing has been imposed on the occupants. As far as the plan is concerned, living and bedrooms occupy all outer wall faces, storage, bathrooms and kitchens being always withdrawn behind these—stairs, elevators and lobbies, more behind still. With the possible exception of the kitchen, the housewife's work area, which recent development in Europe and America links much more freely with the social area of the home, this arrangement probably suits most people quite well. Mies uses the same kind of method of arriving at all-glass buildings on the IIT Campus. The plan requirement of one of these, for example, includes the provision of a lecture theatre and many classrooms. By wrapping the classrooms, which need glass areas, all around the theatre, which does not, four glass façades are produced. The question of orientation then arises, and this has been a subject of controversy in most of Mies' Chicago buildings.

It must not be forgotten that for long periods during typical summer conditions in Chicago it is unbearably hot inside and outside buildings, behind glass or not. Only air-conditioning can give any sort of relief and many people have installed this in 860 and 880. There is a tendency here to feel that when so much discomfort results from the summer sun, it is better to try to avoid it altogether—a directly opposite view from that put forward for so many years by Le Corbusier and his followers.

To ignore the sun because of unpleasantness in summer and autumn forfeits all the pleasure it can give in winter and spring—a period when its infra-red and ultra-violet rays are most effective, and it seems to me that it should be part of the equipment of a building to balance this situation so that maximum advantage can be taken at all times.

During the worst heat Mies' towers cannot have been more unbearable than the more traditional type of dwelling I lived in, and at other times they have many advantages. The problem waits for a solution to the former which does not sacrifice the latter.

Interiors of apartments I have seen were furnished in a simple contemporary manner but a glance at the buildings from Lake Shore Drive shows that most people have surrounded themselves with a great variety of decorative effects, not in the least simple, which the structure has left them free to do. The exterior remains unaffected by this.

Viewing the exteriors of these towers is a very strange experience which is also very exciting. This is because of an optical illusion which occurs as a result of the black painted I-beams spaced at regular intervals. The illusion is that one side of each tower is solid black steel and the other solid glass. With a change of viewpoint this effect can be completely reversed. This self-changing effect on the scale that it is here applied (the long side of each block is 270ft high and 100ft wide) has to be seen to be believed.

The glass is not transparent to the observer but dark and reflecting, with a deep bluish colour that goes well with the black steel and aluminium window frames.

* * *

The Carson Pirie Scott store is a building that is interesting from two entirely different viewpoints. Historically it was designed in 1899 by Louis Sullivan and built in 1903 at the climax of the structural development of the skyscraper by the Chicago School. The famous curtain wall, as Sullivan called it, is even more impressive than it has always seemed to be in photographs because of the variety of the angles from which it is seen.

The building today, and this is a different viewpoint, is one of Chicago's leading department stores and it is interesting to see how it now works. Visiting the interior of the store and taking the escalators, recently provided, to the upper floors, one is surprised to find that the expected view down into the street below is not there. It has been blocked by rows of offices which have been placed round the outer perimeter of the building. Daylight is no longer sufficiently important for the main sales floors. Full advantage cannot be taken of it, and also it is lacking in flexibility—so it has been given to staff workers. Thus the curtain wall, designed by Sullivan to let in the maximum amount of natural light—as Giedion describes it, ". . . to fulfil its indispensable function, the admission of light,"—has changed its role. Its glass area is now too great for the rooms behind, but by fitting metal Venetian blinds it has been possible to cut down the admission of light to the requirements of a small office space.

The situation curiously resembles the arrangement of the IIT building already referred to; the sale space is a windowless internal area divided by screens and counters and it is surrounded by small rooms each having an all-glass wall. However, the Carson Pirie Scott store was always a glass building. The difference is that the glass façade no longer represents clearly ("expresses") the plan as it originally did.

This is an interesting point, though less striking than the practical demonstration of another one—the ability of a skeleton structure with panel infilling to withstand change.

* * *

The IIT Campus and Student and Faculty Housing are now being developed under Mies' control (previously the housing had been a separate feature). The buildings completed so far suffer from their environment almost as much as 860 Lake Shore Drive gains. The site is in the middle of an area that has deteriorated very seriously, the Central South Side—a wasteland of overcrowded tenements occupied mostly by coloured people. At one time a high-class residential area, it has lost everything but its good position. Near to the Loop, it is also within sight of the lake, although separated from it by a wide mainline railway, beyond which is the Lake Shore Drive. A very ambitious effort to reclaim this region and create a new neighbourhood is being made by federal and city government planning authorities and by private enterprise. Projects now under construction include the IIT Campus and Housing, the Michael Reese Hospital Development with which Walter Gropius is connected—also incorporating housing—and several multi-storey housing schemes. Lake Meadows, the largest of these, is a New York Life Insurance Company project, designed by the Chicago office of Skidmore, Owings and Merrill. It will have a regional type shopping centre, vertical slab apartments overlooking the lake and terrace housing with gardens.

At the moment it is unfortunate that IIT Campus, like the constructed parts of the other schemes in this transition stage of redevelopment, is juxtaposed on a slum in which it is not advisable for white people to walk the streets at night. The conflict between long-term policy and immediate needs must have been a very trying one for Mies, and it is not surprising that in preliminary schemes there was an attempt to create a wide enclosed Campus, such as Harvard Yard, which might have formed the basis for a new environment. This idea was ruled out when per-



Photo : Chicago Aerial Survey Co.

An aerial view of Chicago looking north from the Loop. 860 Lake Shore Drive is just out of the picture in the right foreground. Yacht harbours and parks run along the length of the city for approximately 20 miles—half of which is shown here.

mission could not be obtained to block a through street which divided the site. The unity which now exists between the scattered buildings comes from the intellectual discipline with which the skeleton structures have been organized. There is nothing arbitrary or decorative about the patterns of black steel and buff brick.

The cause can be discovered in the width of an overhead gantry or the height of an access gallery rather than in any conscious striving for Mondrian-like effects. But this is not to say that, within the steel structures themselves, there is nothing contrived. For example, in the Metallurgy and Chemical Engineering building there is a wedge-shaped lecture theatre in the centre of the plan. It

is windowless, with a steeply stepped floor. Seats of plywood moulded into complex curves make a cumulative or additive pattern against a curved rear wall, and this is utilized in a very interesting way to exert the maximum influence: (1) within the theatre, as a concave surface; (2) in an entrance hall behind it, convex; and (3) in the area formed by trees, a lawn, and other buildings outside on the Campus. The last step occurs because one side of the entrance hall is unobstructed glass. The curved wall is panelled and at night can be seen far across the Campus, glowing with the pleasant colour that natural wood has under strong electric light.

GEOFFREY HOLROYD.



Photo: Hedrich-Blessing

General view from Lake Michigan.

860 LAKE SHORE DRIVE, CHICAGO, U.S.A.

ARCHITECT: LUDWIG MIES VAN DER ROHE

Associate Architects: Pace Associates, Holsman, Klekamp and Taylor

860 Lake Shore Drive is Mies van der Rohe's most important building to date. It stands on a superb site overlooking Lake Michigan in a good residential district a short distance from "The Loop," Chicago's business centre. The building consists of two separate identical rectangular towers, placed at right angles to each other, both 26 storeys high. Both tower blocks have their own entrance lobby, etc., and the two are connected by a covered way. Beneath the building is garage space for 116 cars, while the first floors are devoted to communal laundries, deep freeze, and other service rooms. Above this level, each floor contains identical flats, 3½ room apartments in the North Block and 6 room apartments in the South Block.

Externally the buildings are faced entirely with glass from floor to ceiling, the glazing to the service floor being lightly etched to give a measure of obscuration. The façade of the building is divided up with applied steel mullions of H section forming a regular grid over the surface of the building; the whole of the steel being painted matt black with a special bituminous paint originally made for the U.S. Navy. Windows are aluminium, the bottom unit being hopper hung and the large upper unit pivot hung. Since the building was erected roller blinds have been fitted to reduce summer heat gains, grey outer curtains are fitted as part of the furnishings to all flats, and an inner curtain rail is provided for the tenant's own curtains.

The structure consists of a steel frame erected in stages, the floors are concrete slabs cast on prefabricated panels of corrugated iron on to which reinforcing mesh was welded. The steel mullion units were jig welded and assembled at the highest level of the building, lowered over the side and welded in position, the window frames being fixed from inside, thus entirely eliminating external scaffolding. Heating is partly by radiation from the suspended ceiling and partly by convection from gilled tube units beneath the windows; in some cases it has been found that the radiant heating is adequate by itself. Air conditioning is provided by built-in units for certain apartments and 30 room units are available for the two blocks and can be inserted in the lower pane of the windows; they project into the room unlike the usual American unit which projects outside and disfigures the building. In each building there are two 13-passenger lifts which serve all floors including the basement garage area.

The project was financed on a co-operative basis, each tenant making an inclusive payment as purchase of the apartment, \$6,500 for the small flats and \$12,000 for the larger ones. A monthly rental averaging \$105 for the small flats and \$210 for the large ones is paid by each tenant to cover maintenance, running costs, taxes and mortgage interest, the latter being held by one of the big U.S. Insurance Companies.

This monthly charge will decrease annually over 20

years until it is almost halved. Apartments can be sold at any time subject to the agreement of a controlling board, and the popularity of the apartments can be judged by the fact that only a year after they were occupied, flats were changing hands at nearly twice the original purchase price.

The total construction cost of the scheme was \$4,404,000, which included difficult foundations and the curtains provided by the sponsors; this works out at \$10.38 (or about 75s) per square foot, this figure according to Mies being 5-10 per cent *below* conventional flat costs in Chicago.

No written description of 860 Lake Shore Drive can do it justice, and even the best photographs fail to give an adequate impression of the monumental character and simple dignity of these two blocks; they must be seen to be appreciated. In spite of the apparent simplicity of the structure a tremendous amount of careful detailing has gone into every part of the building, nothing has been left to chance as this week's *A. & B.N.* detail sheet shows. Considerable attention has been given to weathering, and in spite of the exposed position of the site and the considerable temperature changes experienced in Chicago, the buildings bear no signs of deterioration or structural failure of any description.

[Continued on page 405]



Inside view of mullions in position, also showing pre-fabricated floor panels before concreting.

Detail of steelwork, mullion unit being fixed in position.



E. DELAWARE PLACE

NORTH
BLDG.SOUTH
BLDG.

E. CHESTNUT STREET

NORTH

GROUND FLOOR PLAN

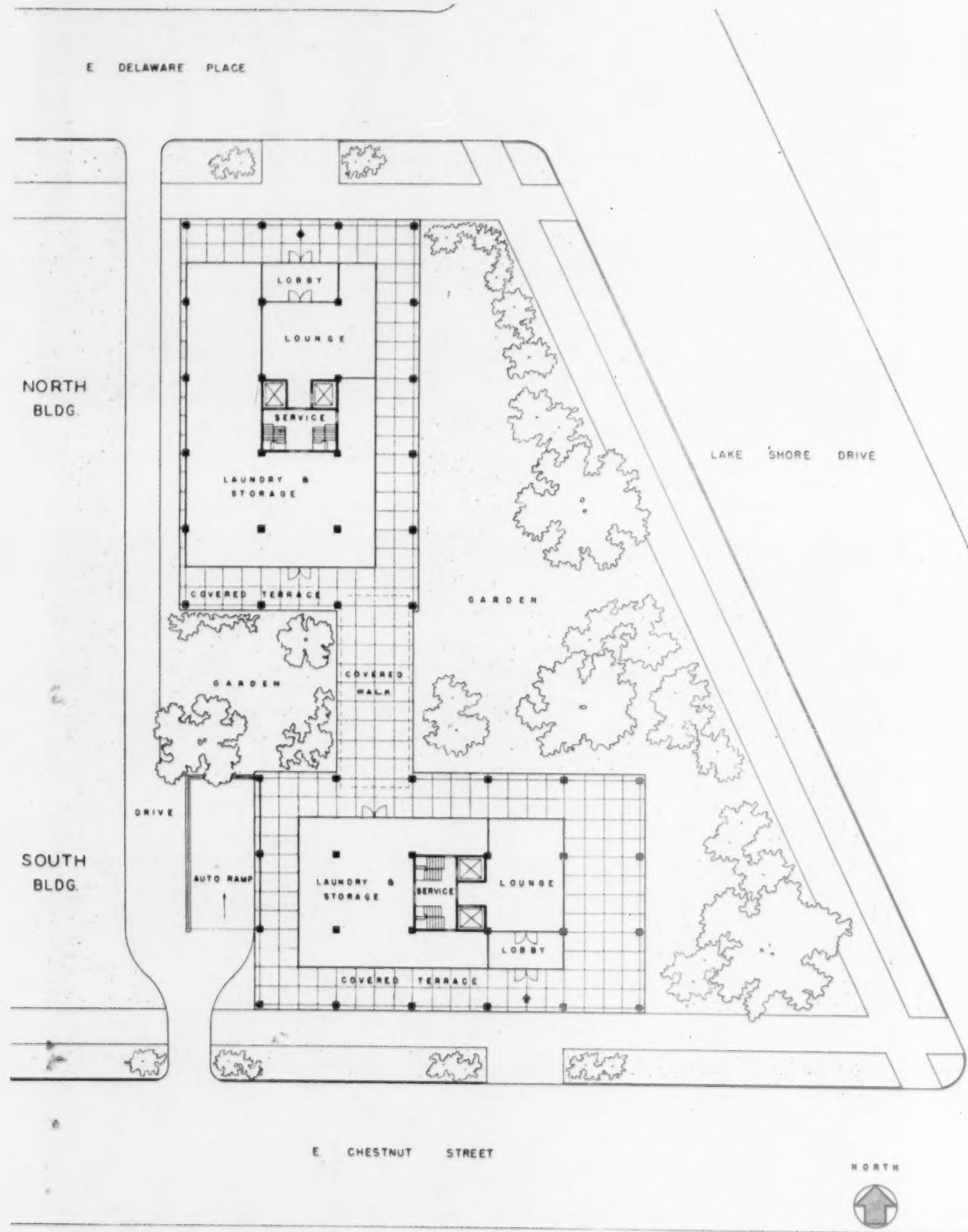




Photo : Hedrich-Blessing

Entrance to underground garage at rear of south block.

With such a large area of painted steelwork one would expect to find some evidence of rust, but a careful examination failed to reveal any signs of even the slightest discoloration of the steelwork.

Many of Mies van der Rohe's early sketch projects

in the 1920s were in the form of glass towers, which as drawings or models looked most impressive ; now that his early dreams have been realized in Chicago they are even more impressive than those early sketches, and make a great deal of so-called "modern" architecture look both

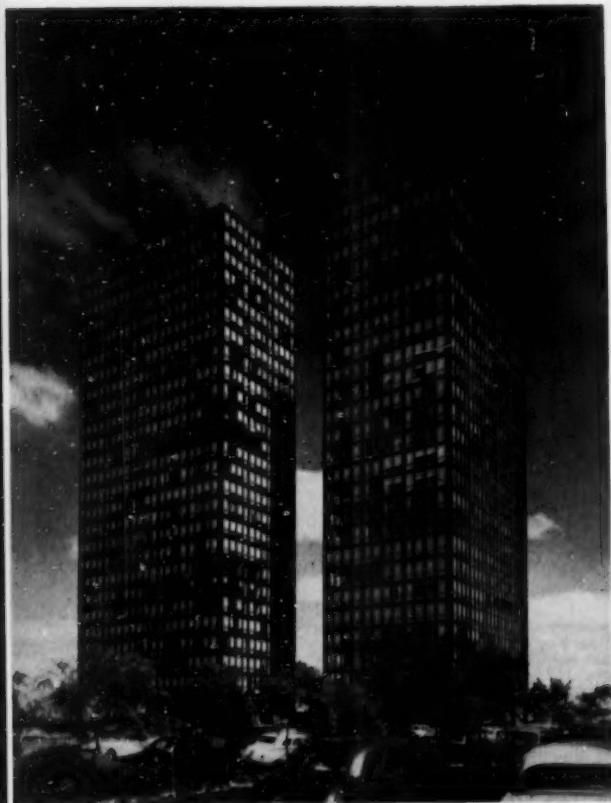
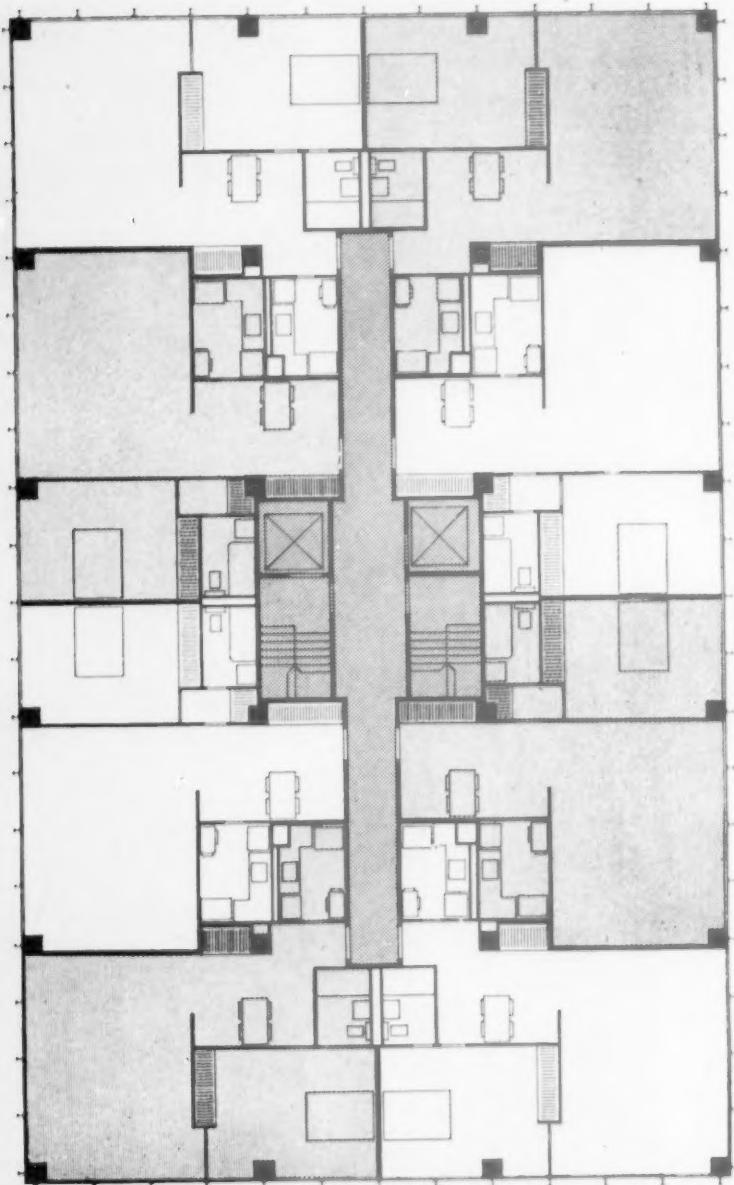


Photo : Hedrich-Blessing



**TYPICAL FLOOR PLAN, NORTH BUILDING
EIGHT FLATS**

General view from city side by day, and by night.

pretentious and unnecessarily fussy and complicated. For Mies, pattern making on drawing board elevations is not good enough, his interest is in structure ; in his own words " We are not decorating. This is structure. We put up what has to be built and then we accept it," and again, " Architecture has nothing to do with the invention of forms. It is not a playground for children, young or old. Architecture is the real battle ground of the spirit."

EDWARD D. MILLS

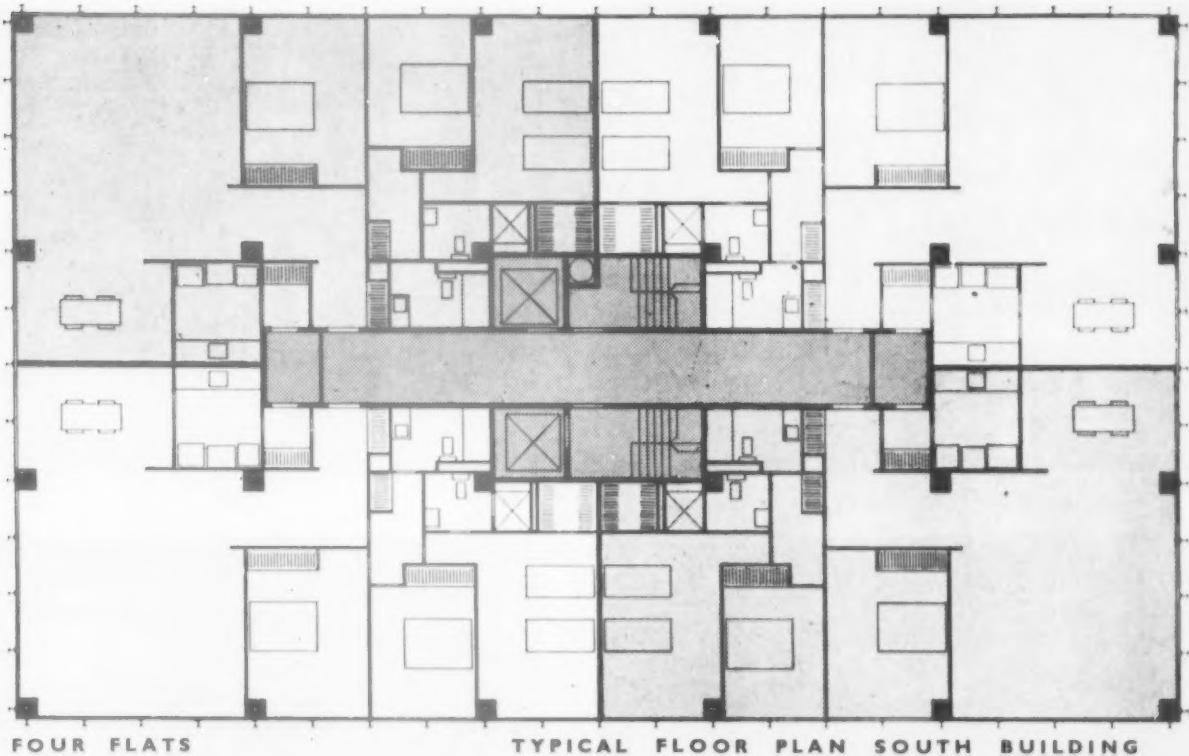
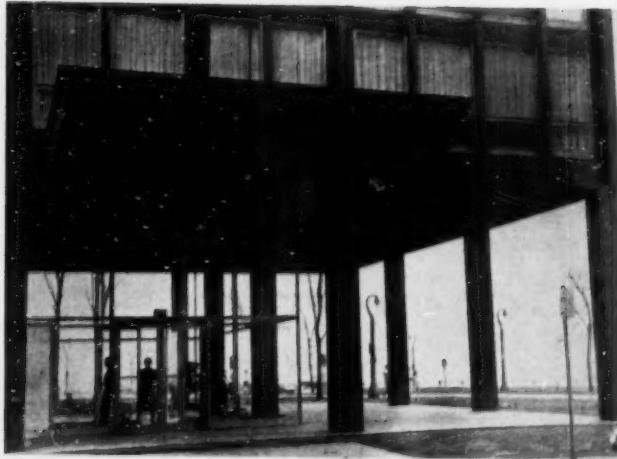
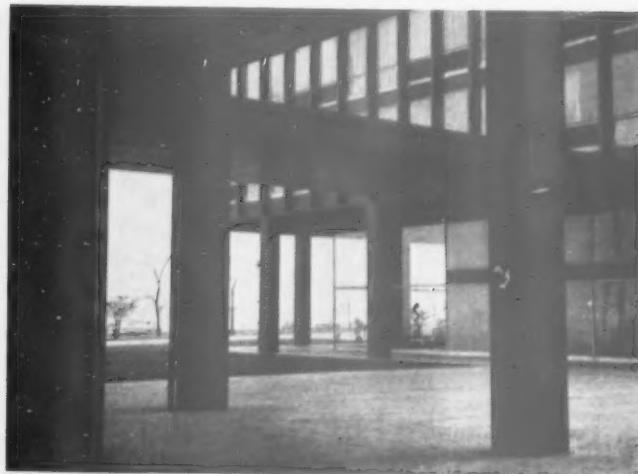


Photo : Hedrich-Blessing

Typical flat interior—overlooking the city



Entrance Hall
and Lobby
at night

Photo :
Hedrich-Blessing

Left: Detail of typical façade.
Right: Ground floor showing covered way linking North and South blocks.

Right: Ground floor showing covered way linking North and South blocks.

Left: Entrance to South block.
Right: South block entrance lobby with North block and lake in background.



TYPICAL FLAT, NORTH BUILDING

860 LAKE SHORE DRIVE, CHICAGO, U.S.A.



STRUCTURAL HONESTY

Extracts from a paper read at the A.A. on 25 March by OVE ARUP, C.B.E.

IT happens to be my job to design the structure of buildings under the guidance of various architects. A very interesting job, if one happens to be interested both in structure and in architecture.

Now if an engineer is put to design a structure which has to satisfy certain conditions, he knows exactly what to aim for, namely, to find the most economical solution to the problem. Not so, if he is collaborating with an architect, or receiving instructions from an architect. In that case the right structural solution is only part of a wider problem, the right architectural solution. The two are completely mixed up. Economy is still an aim, but not the only one. The effect on the architecture must also be considered, and here the architect has the last word.

This means that there is a kind of dual control exercised in the design of what I might term an "architectural" structure. The engineer designs, but the architect decides what he is to aim for.

The architectural guidance varies from case to case, both in intensity, quality and kind. This is only natural, for architects have different personalities and have different views on architecture. At one end of the scale, some architects know exactly what they want, and they exercise strict control to get it. They may even require the structure to suffer the most unnatural contortions in order to produce the desired architectural effect. At the other end of the scale there may be architects who do not think that the structure should be interfered with at all. They take what the engineer gives them, and make the best of it.

The engineer need, of course, not concern himself very much with all this, he need only find out what is wanted, perhaps argue a bit, and get on with the job. Experience will soon teach him what the architect is after and, knowing the possibilities, he will be able to make sensible suggestions. But the fact that there are a number of incompatible "ideologies"—or bits of them—floating about amongst architects can be somewhat puzzling for the engineer, and it is only natural that he should try to find out what is behind all this.

Anybody who talks about "structural honesty," the "truthful expression of structure" and such, is obviously of the opinion that it is a good thing, a thing to be admired and aimed at, whatever the exact meaning of the term. I think it may be a good thing, if understood rightly. On the other hand, it may very well be understood wrongly, and just be a lot of nonsense.

I am not primarily interested in the meaning and validity of this particular term, but I am interested in the wider question of finding a criterion by which to judge the "goodness," "rightness," "excellence" or "merit" of an architectural structure—and therefore any structure; in other words in what to strive for, when designing a structure. And I want to look at the question, not exclusively from an engineer's or architect's point of view, but from the point of view of that ideal person, the architect, engineer, builder, the person who is an architect and also knows all there is to know about building science and practice. For the dual control, which I spoke about, is of course an unfortunate thing made necessary by growing specialization, and should not reflect any difference of aim. The aim is, simply, to create good architecture.

We will, therefore, have to start with a definition of good

architecture; then we have to consider the interrelation between structure and architecture and try to find out in what way the design of the structure can contribute to the common aim.

If you will bear with me, I will begin by trotting out Wotton's time-honoured conditions for well building: *Commodity, Firmness and Delight*.

Now to my mind, the three terms are not on the same level. Commodity and Delight belong together, they represent what we *want* of a building. It may be difficult to decide where the one ends and the other begins, but together they are what we are striving to obtain when we decide to build.

Firmness, on the other hand, is merely a condition we have to fulfil in order to get the other two. It is a means to an end. Without firmness, the building would collapse, and we would not be able to enjoy the other two for long.

Firmness stands for all the qualities in a building which make it permanent; for its structural strength, which enables it to withstand the force of gravity and other forces of nature, and the weathering and wearing qualities of the materials employed. In order to be more precise, it would perhaps be better to divide Firmness into these two qualities: Structural Stability on the one side and Durability, or Wearing Quality, on the other. The latter may reasonably be counted as a Commodity or may even add to Delight. If we can afford to finish our building in durable materials, it will certainly add to the value of the building, and will decrease upkeep.

The other part of firmness, Stability, is something we must have, but we do not value it for its own sake, and if we were offered twice as much of it as necessary under any conceivable circumstances, we would not be interested at all. We do not even notice it, only the lack of it would be felt.

I do not think, therefore, that the fact that a building shows no tendency to collapse should in itself be a sign of architectural merit. It should be taken for granted.

But there is another thing which I think should be taken into account in judging Architecture, and that is the Economy of Means employed in reaching the result.

Economy of means has two aspects. The first, and obvious one, is measured by the Cost of the building in £ s. d. Cost is the limiting factor we are always fighting; it may truthfully be said that the best architect is the one who can produce most Commodity and Delight from a given sum of money.

It might be argued that the concern about cost is a modern phenomenon which has nothing to do with the fundamental principles of Architecture. I don't think that would be right. Cost may have nothing to do with the artistic value of the final result, but Architecture is not only Art. The architect who could produce the same amount of Commodity and Delight—assuming that it was possible to measure them—for a lower cost would be a better architect, and his work would be better architecture.

The other aspect of "Economy of Means" is of an aesthetic nature and belongs to a discussion of Delight. In any form of Art, Economy of Means is appreciated for its own sake—in writing, for instance.

For these reasons I am tempted to try to improve on Wotton's criterion for "Well Building." To me, Architecture is the result of a struggle to get as much as possible of Commodity and Delight out of a given expenditure of effort or money—if I may mention so mundane a matter. It is easy enough to provide more Commodity, if not more Delight, by spending more money. To me, the skill of an Architect and the excellence of an architectural solution is measured by the ratio between what is obtained and what is expended.

This criterion is, I think, valid for Architecture but not necessarily for pure Art. For the latter, the measure of its greatness may be the impact on the recipient, no matter how it is obtained; but in the case of Architecture, where economy of means is an essential aim, it must also be taken into account in any judgment of merit.

If this was generally accepted it might induce Architects to give more attention to this matter of cost.

My "formula" for judging the "Excellence" or

"Efficiency" of an architectural solution is as follows:

$$E = \frac{B.C. + E.C. + D.}{Cost}$$

B.C. stands for "Basic Commodity," which is meant to indicate the basic requirements of the scheme—minimum floorspace, degree of heat insulation, etc., in other words, the minimum standards of performance indicated in the architect's "brief."

E.C. stands for "Excess Commodities" provided in excess of basic commodities. They may be commodities of the same kind, or they may consist of desirable features not covered by the specification or brief. Different architectural solutions, which all can be said to satisfy the basic requirements, are bound to differ in respect of "Excess Commodities," and this difference must in fairness be taken into account when we compare two schemes.

D. stands for "Delight" or aesthetic excellence. It could have been included under Excess Commodity, but it may be better to have a special heading for all those intangible forms of "Commodity" which cannot be measured by a quantity surveyor.

"Cost" is the total effort to be expended or sacrifice to be made to achieve a desired result. Costs are measured in £ s. d., but other considerations such as Time, and scarcity of materials and labour, come under this heading.

The trouble with this formula is this: that whereas Cost can be measured in money terms, and Basic Commodities can be reasonably valued at the lowest cost for which they can be obtained in the given circumstances, it is very difficult to put a money value on Excess Commodity and Delight. It depends so much on who makes the assessment. A client, who is mainly interested in cost and is prepared to put up with a low quality job, is not likely to put much value on, for instance, extra heat insulation, which he has not asked for. And as regards Delight, it is not even possible to obtain agreement on what constitutes Delight. Nevertheless, it is generally agreed that Delight has a value, and that it is the business of the Architect to fight for it.

Another difficulty is, that in order to judge the merit of an architectural effort, it is not sufficient just to go and have a look at the building; if we accept this formula, we ought to know something about the Architect's "brief"—the Basic Commodities asked for, the difficulties encountered, and the cost of the building. But in most cases that is a fair enough statement—we ought to know this to enable us to comment fairly on the Architect's work. In exceptional cases, where the aesthetic factor is the dominating one—in the case of a Cathedral or a War Memorial, for instance—we are judging mainly the Delight produced, and the other factors are then unimportant.

If we now turn our mind to the function of Structure in building, it is clear that its main function is:

To ensure Stability at as low a cost as possible, consistent with the preservation or creation of Commodity and Delight.

A good structure is first and foremost an economical structure, if a structure is sufficiently strong for its task, that is all we need; if we make it twice as strong, it would hardly add to the value of the building. But if we could make it for half the cost, that would be very welcome indeed.

If this was all, it would be very easy to measure the excellence or otherwise of a structure. But the structure impinges on the architecture all the time. I have tried to make a list of the number of ways in which the structure affects the Architecture as a whole, and I will deal with them one by one.

The list is as follows:—

- | | |
|---|-------------|
| (1) Structural solution affects costs | Cost |
| (2) Structure as obstruction affecting | E.C. and D. |
| (3) Structure as part of artistic content | D. |
| (4) Structure felt as structure | D. |
| (5) Structural pattern as aesthetic inspiration | D. |
| (6) Structural techniques as danger to Art .. | D. |

(1) Structural Solution Affects Cost

The technique of building has undergone many changes, especially in later years, but the structure is still that part

of a building which holds the whole thing together, which transfers all loads and forces down to ground and ensures stability. It is an essential part, but only a means to an end. The structural design indicates the method of building, what practical steps we must take to get our building. Naturally, we don't want to be put to more bother and expense than necessary, and it is the engineer's job to see to that. Engineering means indicating practical and economical ways of building, and progress in engineering means that we can now do reasonably economically what before was very expensive or next to impossible. The engineer is supposed to be the man who can do for one pound what any fool can do for two.

This used to be the Architect's job, too, before there were any engineers, and it really still is. He is just using the engineer to help him with it. There is a danger in this, and this danger increases, when the architect cannot even take out his own quantities to make cost comparisons between different sketch schemes. Good building is still practical building, and practical building requires that the economic facts of life are considered when the scheme is first conceived. If the Architect cannot himself use a slide rule, and if he cannot make a quantitative cost analysis of alternative planning solution, he is in danger of losing touch with the foundation of practical facts, on which alone his Art can flourish.

Early collaboration between Architect and Engineer is a great help, but it must be early, because the most effective step in economy is taken in the early planning stage.

Anyhow, the most obvious and direct contribution which the structural design has to make towards good Building is to indicate a practical and economical method of building. But there are also the other points on my list to consider, and they are all concerned with the impact of the Structural design on "Excess Commodity" and "Delight," and their consideration invariably tends to put the cost up. We are then faced with the fundamental conflict between what we would like to have, and what we can afford; a conflict, which can to some extent be resolved by good design, but which generally leaves a painful policy decision which has to be made by the architect on behalf of the client.

(2) Structure as Obstruction

The structural members naturally occupy space and are apt to get in the way. Especially columns are often looked on with disgust by the Architect, where they are most needed structurally. Of course they can be taken away, but it costs money, sometimes a lot of money. Is it really necessary to dispense with them, can the client afford it? Or can we think of a different and better arrangement which can satisfy both architect and engineer? These are the questions which always recur. Columns and beams protruding into the rooms, unsightly roof trusses, how can they be "ironed out"? How can we get the maximum flexibility which clients and architects are always hankering after, but which they seldom are prepared to pay for?

The answer is as usual: good design and compromise. In this field engineering progress has of course made an enormous difference. Architecture is gradually being freed more and more from structural fetters. But we still have to have some structure somewhere.

(3) Structure as Part of Artistic Content

If we can't conceal the structural members altogether—which may in many cases be the most desirable solution—then they must of necessity form part of the architectural pattern, and be subjected to aesthetic discipline, just as windows, walls, staircases, chimneys and the rest. The structural members may even be the dominant feature in this pattern.

If we look at a building purely from an aesthetic point of view, as a piece of sculpture or a series of delightful views, then it is most unlikely that our aesthetic requirements will coincide with the most economical solution. Columns, beams and arches, when viewed as subject matter for artistic creation, may have to be modified in shape and size and general arrangement away from what is dictated by structural or economic considerations. Especially joints are difficult; gusset plates, rivets, haunches, brackets, splayed

corners—it costs money to make them neat. Again, it is a struggle between Delight and Cost, and a good solution would be one where the desired effect was obtained without too much structural contortion and economic sacrifice. But if the effect obtained is sufficiently good, both may be justified. In the formula, it is perfectly legitimate to increase the denominator, if the numerator is increased in proportion, or more.

(4) Structure Felt as Structure

Up till now the going has been fairly easy because, whereas I have treated Architectural Delight with great deference, I have made no attempt to define it. I have assumed it was of the same nature as the Delight we meet in Sculpture and Painting, on which I should certainly not dream of expressing an opinion, at least not from this exposed position.

It is true, however, that each Art form follows its own laws, and that Architecture may have to be judged differently from other visual Arts. I am not thinking of the "Commodity" part of it—that has to be worked in, of course—but of whether Architectural Delight is something different from sculptural or pictorial Delight—which I am sure it is—and whether this difference includes a necessity of seeing or feeling the building as a structure resisting the force of gravity and other forces, and giving an impression of balance, strength, poise or what not. Must one understand how a building acts structurally to be able to appreciate Architecture?

Architecture is, of course, different from other visual Arts, because for one thing you can move into it, you are affected psychologically—and very strongly, I should say—by proportions of spacial enclosures and sequences, perhaps by instinctive sensations of weight or uplift, by effects of light and shade and textures, by a sense of organization and control of space. But if it were found, for instance, that "structure must be truthfully expressed," it would affect my attempt to find out what is expected of an architectural structure, and it would make things very difficult.

If the feeling for structure as *structure* plays any role in architectural criticism, we have to ask ourselves who is having this feeling. Is it a layman, or is it a structural expert?

The layman—and sometimes even the Architect—has not much understanding of how the structure really acts. He only goes by appearances, and may not know the difference between the supporting and the supported parts of a building. His understanding, such as it is, is based on feeling. If he is sensitive, the proportions and relations of the masses may give him a sensation of balance or poise which will give him aesthetic pleasure.

A new and daring construction may of course give him a feeling of structural insecurity. That is a kind of structural criticism, but that kind of shock is lost by repetition, and would seem an insecure basis for architectural criticism. There can obviously be no question of stopping the advance in structural technique for fear of evoking apprehension in the onlooker. He will get used to it. In some cases an effect of shock and surprise may be deliberately intended as part of the architectural effect—but this kind of thing will wear off in time.

If we go to the expert, on the other hand, he certainly can obtain a great pleasure from the contemplation of an elegant, ingenious or novel structure. He can understand its finer points, the economy of means employed. It is the craftsman's pleasure in a job well done.

The opinion of the technical expert is of course important. But it is not architectural criticism. We cannot demand of the architectural critic that he should be an expert on structure as well. Structural "rightness" as such contributes to architectural quality through its beneficial effect on costs, its consonance with the architectural plan and its contribution to the aesthetic pattern; Cost, Commodity and Delight. The two first are matters of fact, and can be understood intellectually, the last is a matter of appearance, and can only be felt. None of them demands the "truthful expression of structure" as a necessary condition, although it may in certain circumstances and with

minor modifications be a useful means of obtaining both economy and Delight.

No, the demand for "structural honesty" does not come from the layman or the structural expert. It comes from a certain school of architects. It is a piece of ideology, an aftermath of functionalism, and there can be a certain amount of sense in it. But before we consider this bit of sense, let us see whether we can find out what the term could possibly mean.

What is the "right" structural shape?

As far as I can see, it could mean two things, either related to what I would call the

(1) Organic structure, or to the (2) Economic structure.

The "organic" structure is economical in the use of materials, the "economic" structure is economic in means of production. The two may coincide, but mostly they don't.

In an organic structure, the material would be disposed in the most advantageous way to resist the forces acting on it. In nature we often find shapes, like the structure of a leaf, for instance, which seem to follow this principle. Hence the name "organic." But although the structure of a cabbage leaf may be economic in the use of materials, it would certainly not be economic to imitate it in modern structural materials.

Each material made or fashioned by man, or rather by man-made machinery, has its own characteristic economic shape, and this is generally not an organic shape. Take a steel joist, for instance. The shape is designed to resist the maximum bending moment in the middle of the span. But it is not the right shape for the ends of the beam, where the bending moment is reduced and the shear forces prevail. The organic shape would be one which changed section all the time, and it would be an aesthetically attractive shape. But it could not be economically produced. The old "fish belly" cast iron beams had a shape which approached the structural or organic ideal, but they were superseded by modern mass production methods. That is the tendency throughout.

Reinforced concrete is the modern material which still lends itself to the creation of organic shapes, especially when it is cast *in situ*, and that is no doubt the reason why it is so beloved by some modern architects, in spite of its drawbacks in some other respects. And in large-scale structures, such as bridges, dams, large span roofs and some industrial structures, the "organic" shapes may be the economically correct ones, because it is most important to save material and reduce the dead weight of the structure. But in the ordinary building simplicity of formwork tends to predominate over saving in concrete, from an economic point of view.

Moreover, the "organic" shape is only correct for a particular set of forces. If the wind blows from another direction, or the maximum load occurs in the next bay, the shape should really be different to be effective. The "right" shape is therefore one which "envelops" all the organic shapes appropriate to the varying conditions, and this is not likely to be nearly so interesting.

In pre-stressed concrete and all factory-produced concrete the shapes of the members are governed more by production technique than by the flow of the forces to which the members are eventually subjected. Mass production imposes its own mechanical stamp.

There are also cases where structural "Nudism" comes into conflict with practical considerations of economy and commodity. Take the case of a block of flats in "box-frame" construction. Should this frame be shown on the outside? Some architects think that this is the structurally honest thing to do, and it may or may not add to delight—according to how it is done—but surely the practical thing to do is to let the weather-proofing and heat-insulating skin cover the whole of the building, including the structure. The other may lead to complications or bad practice. It may even lead to the use of external additions to indicate the structure within—express it, as the saying goes—but what happens to "honesty" then?

It comes to this: If "structural honesty" means "practical and economical building," then it does not necessarily imply the display or expression of the structure, or the

use of those "organic" structural forms so much in favour with the advocates of what might be termed "structural-ese" architecture. If, on the other hand, it means the latter, then it may have very little to do with structural or economic necessity, but is, in fact, a possibly perfectly legitimate means of creating architectural delight. That would explain and justify the use of "organic" structural shapes which cannot be justified economically in this particular context or on this particular scale. But then it would seem that the so-called "honesty" really turns out to be dishonesty, not on the part of the structure, which is not capable of such complex behaviour, but on the part of the architect, who deceives himself and others by giving the wrong reasons for what he is doing.

For it is, of course, true that honesty cannot be found in structures, but in architects and engineers. And honesty, to my mind, consists in knowing yourself what you are doing, and being open about it. It is perfectly honest to use the structure to create architectural unity, strength, interest, or what you will; or to use interesting structural shapes to achieve poise, crispness or "economy of means" in the aesthetic sense; and it is equally honest to try to keep the structure out of the way and out of the mind altogether—provided you make no bones about it and do not pretend to do for economic or "structural" reasons what you really do for economic reasons.

Having said all this, I will relent a little and admit that there may be a case for "structural honesty" after all—although it would not necessarily coincide with the truthful expression of structure. There is something very attractive about honesty, and one cannot legitimately prevent people from using the term to indicate something which they happen to like. But it would be difficult to define it. But honesty—on the part of the designer who imparts this quality to his work—figuratively speaking—could mean an honest endeavour to come down to fundamentals, to be direct, forthright, simple in conception, straightforward, to eschew anything fussy, complicated and tortuous—and, having arrived at the solution which has the quality of being obvious, then to marry it to the architectural statement to produce a harmonic whole which needs no concealment to improve it.

(5) Structural Patterns as Aesthetic Inspiration

The fifth point I want to consider is the impact of new structural forms and techniques on aesthetic sensibility. Do they in themselves create new architecture?

It is obvious that modern buildings look different from those built 50 years ago. It is equally obvious that this different look has been achieved by using techniques which were not available then.

But this does not mean that these techniques have created the new architecture. Such techniques do not become architecture in the true sense before they have been assimilated by the architect and subjected to architectural control. Architecture results from building technique plus artistic or aesthetic direction, and it is the latter which is the important factor when we consider architecture as an art.

What has happened in the last decade is therefore not so much that we have been forced by new techniques to change our architecture, but that we have changed our ideas about what kind of architecture we want to produce. We build modern buildings because we want to, not because we must. And we want to, because the aesthetic sensibility of our time has changed. The artistic climate has changed.

When Corbusier created his first modern buildings, it was not as a result of technical necessity. Technically, the buildings were probably not so very good, they were at any rate expensive and difficult to maintain in good condition. But his artistic vision demanded the free plan, the piloti and the rest.

But perhaps I am flogging a dead horse. If anybody doubts that artistic intention counts for more than building techniques in forming the new architecture, it should be sufficient to point to the difference between the Unilever Building in New York and the new official buildings in Moscow.

When this is said, it can be admitted that new technical developments have a share in creating the new aesthetic sensibility. The worlds opened to us by micro-photography, aerial photography and many other technical and scientific developments have enlarged enormously the reservoir of images from which artists draw their inspiration. And the feats achieved by engineers with the aid of new materials, the new bridges, long span roofs, light, spidery yet strong structures—these have fired the imagination of architects and have taught them to see new beauty in forms and patterns derived from the natural exploitation of the properties of new materials.

(6) Structural Techniques as Danger to Art

Advance in technique may thus be a source of inspiration to the Architect. But it also represents a serious menace to architecture, and this is my last point.

Advance in technique is governed by economic forces, and the two combined drive us relentlessly towards mass-production and standardization. It also prompts us to build on a scale which is out of proportion to the human scale, to the individual and his human values. Therein lies a great danger to architecture, which can only thrive where there is a freedom of choice, and where human values are respected, are, in fact, put first.

We can't stop this development. The social or moral atmosphere of our time urges us to extend the "good life" or at least the freedom from want, to the whole of the human race, and that can only be done by utilizing all advances in technique and production. But we can—or we should—insist on certain aesthetic and human standards as well as the standards of efficiency. There is nothing so ludicrous as efficiency gone mad, when the essential aim is forgotten.

To sum up: We have found that in judging the excellence or efficiency of an "architectural" structure we need only ask ourselves two questions:

(1) Is it an economical way of providing the necessary stability?

(2) Does the shape, detailing and disposition of the structural members fit in well with the architectural plan and help the architect to create "delight."

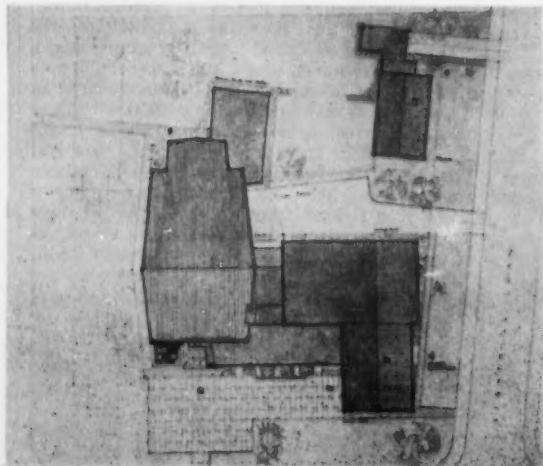
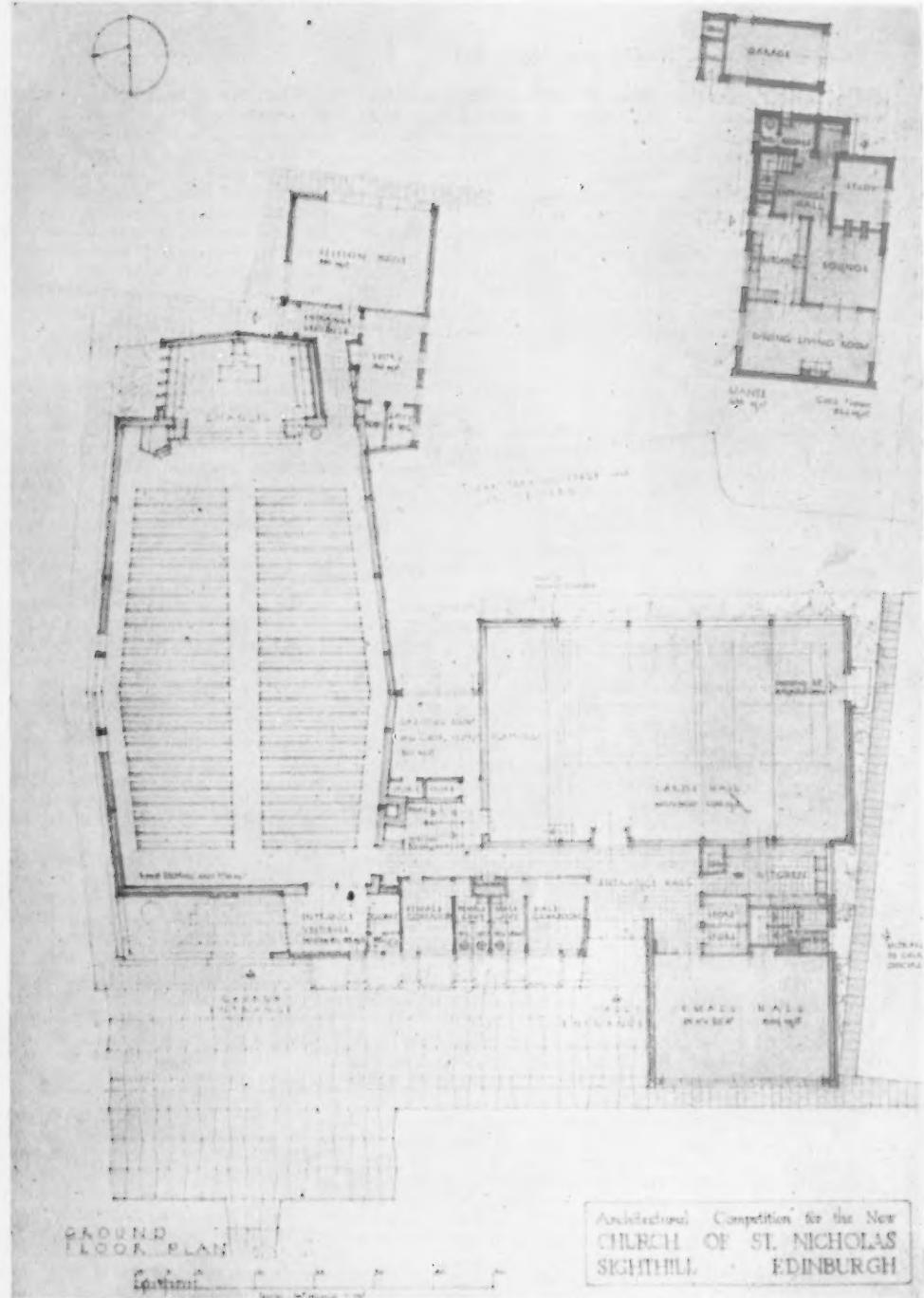
These two objects are, of course, often fighting each other. How much weight should be given to each depends on many things, mainly on the type of building we are dealing with. But if we want as far as possible to reconcile the two aims, that is to provide delight without involving the client in too much extra cost, it is necessary to spend a good deal of thought and work on two different kinds of "integration":

(1) An integration of the architectural and structural idea, achieved by close collaboration between architect and engineer, and

(2) An integration of the structural idea and the method of construction, achieved by pooling the knowledge of structural design with the knowledge of the economics of contracting and manufacturing processes. This can best be achieved by an early collaboration in the design stage with a nominated contractor.

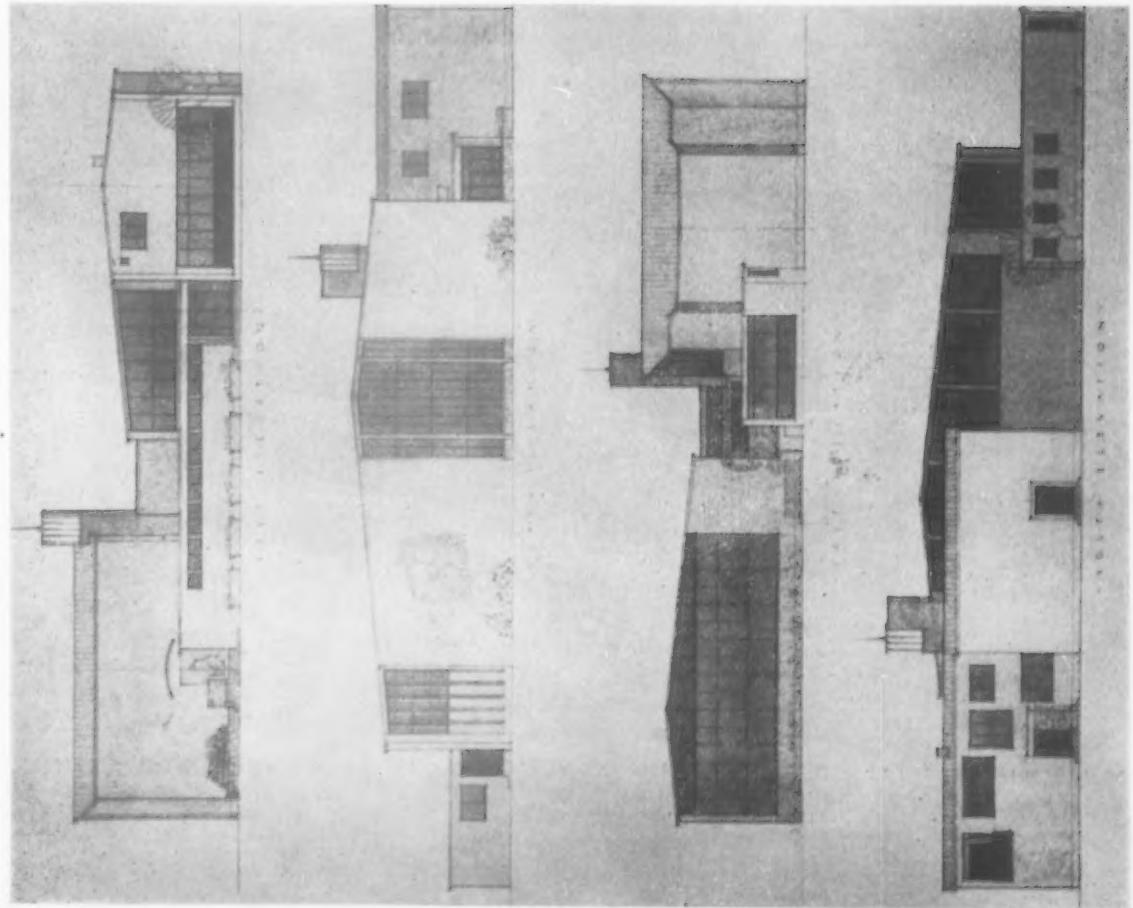
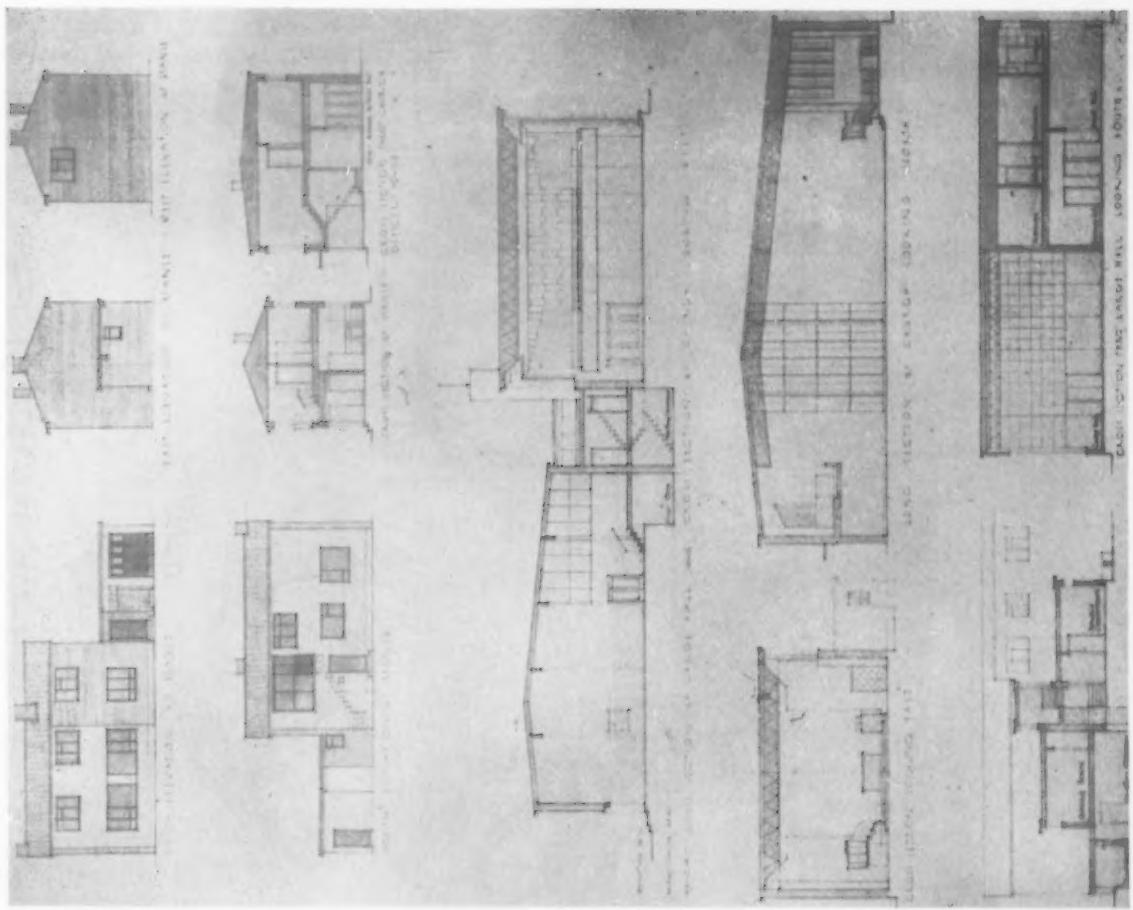
Much has been said about the first kind of collaboration, for instance by myself, and time does not permit me to add more to it here. But I should like shortly to point out that we are rapidly moving into a situation where collaboration between engineers and contractors will become increasingly important.

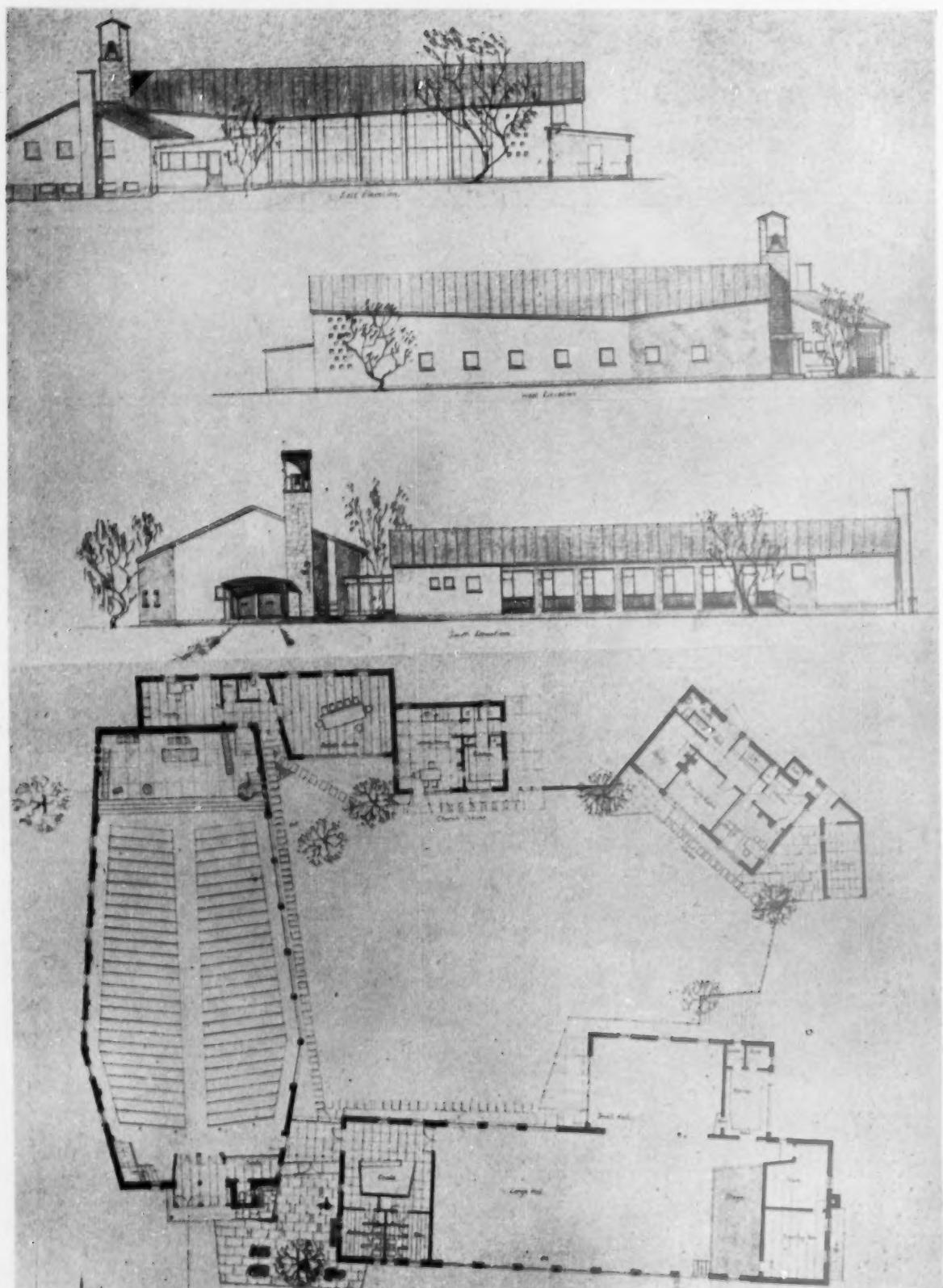
I have always maintained that this kind of collaboration, or at least the pooling of the two kinds of knowledge, was essential for the successful design of large engineering structures such as marine structures, tunnels, bridges, etc. It was of much less, or perhaps even of hardly any, importance in the design of buildings constructed in the orthodox manner which had prevailed for centuries simply because the architect knew all there was to know about building. But this situation is changing. So many new techniques have been developed, many of them based on mass production in one form or another, that the architect and even the engineer are unable correctly to assess the economic implications. And many of these techniques require elaborate plant, long preparation and may involve proprietary rights—thereby throwing the normal way of organizing contracts out of gear.



COMPETITION PROMOTED BY THE CHURCH
OF SCOTLAND AUTHORITIES FOR THE DESIGN OF
ST. NICHOLAS CHURCH, SITHILL, EDINBURGH

The winning design is for a building of mainly brick construction with an entrance vestibule at the West end. The estimated cost of the church, session-house, church halls, and church officer's house was £45,621. The addition of a manse would cost an extra £3,830.





COMPETITION FOR DESIGN OF NEW CHURCH BUILDINGS AT SIGHTHILL.
DESIGN AWARDED SECOND PREMIUM OF £450, BY C. A. HOPE, A.R.I.B.A.

Solid Floors with *MARLEY TILES* reduce costs

For the ground floors of houses, hospitals, schools and public buildings, costings on current prices prove conclusively that very appreciable savings can be made by using solid floors with Marley Tile finishes. Such floors are warmer, drier and more comfortable, and are completely free from all risk of dry rot.



Marleytile colours shown: C206, D319 and Red Feature Strip

Marleytile colours shown:
D324, C206, C205 and D316

Marleytile colours shown: C205 and D324



Marley Skirtings are extremely durable, rot proof, fire-resisting and provide a perfect union between wall and floor.

Cack o'
the walk

The Marley Tile Company, Ltd., London Road, Riverhead, Sevenoaks, Kent. Sevenoaks 2251
London Showrooms at Alfred Gadsden & Co. Ltd., 127-131 Charing Cross Road, W.C.2.



GERrard 7899

the new

ROBERTSON Q DECK

QDA—spans up to 9' 9"

QDB—spans up to 12' 6"

QDS—spans up to 11' 0"

The new types of Robertson Q-Deck now available meet the demand for a well-insulated, lightweight roof construction on flat or average slopes. The Robertson 'Top Speed' method of fastening and Robertson Waterproofing combine to provide rapidly erected roofing ideal for many industrial and administrative buildings. Available with ribbed or flat soffit. Robertson Q-Deck is fully described in booklet Q.D.I. obtainable on request.



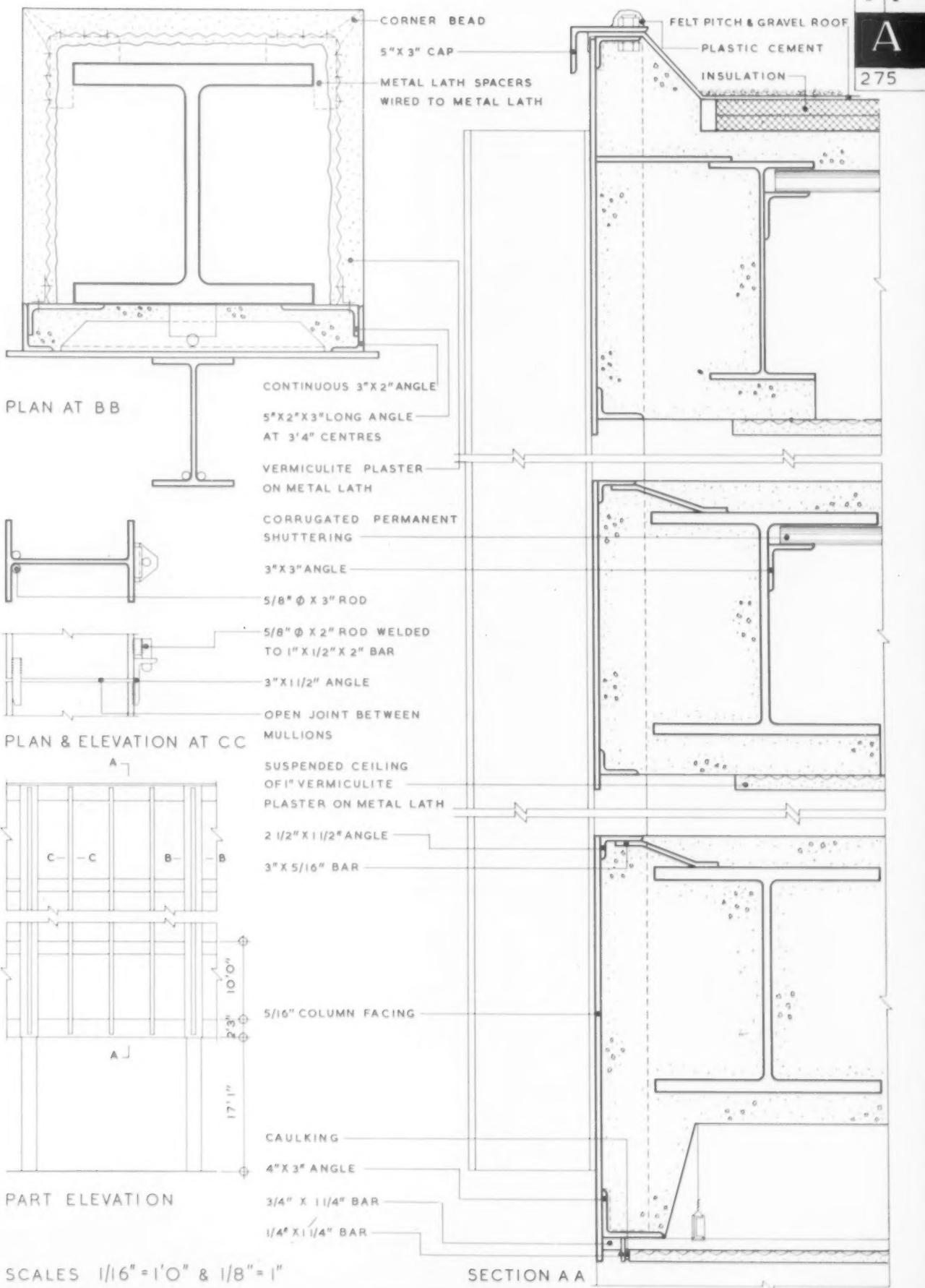
ROBERTSON THAIN LTD

ELLESMERE PORT, WIRRAL, CHESHIRE

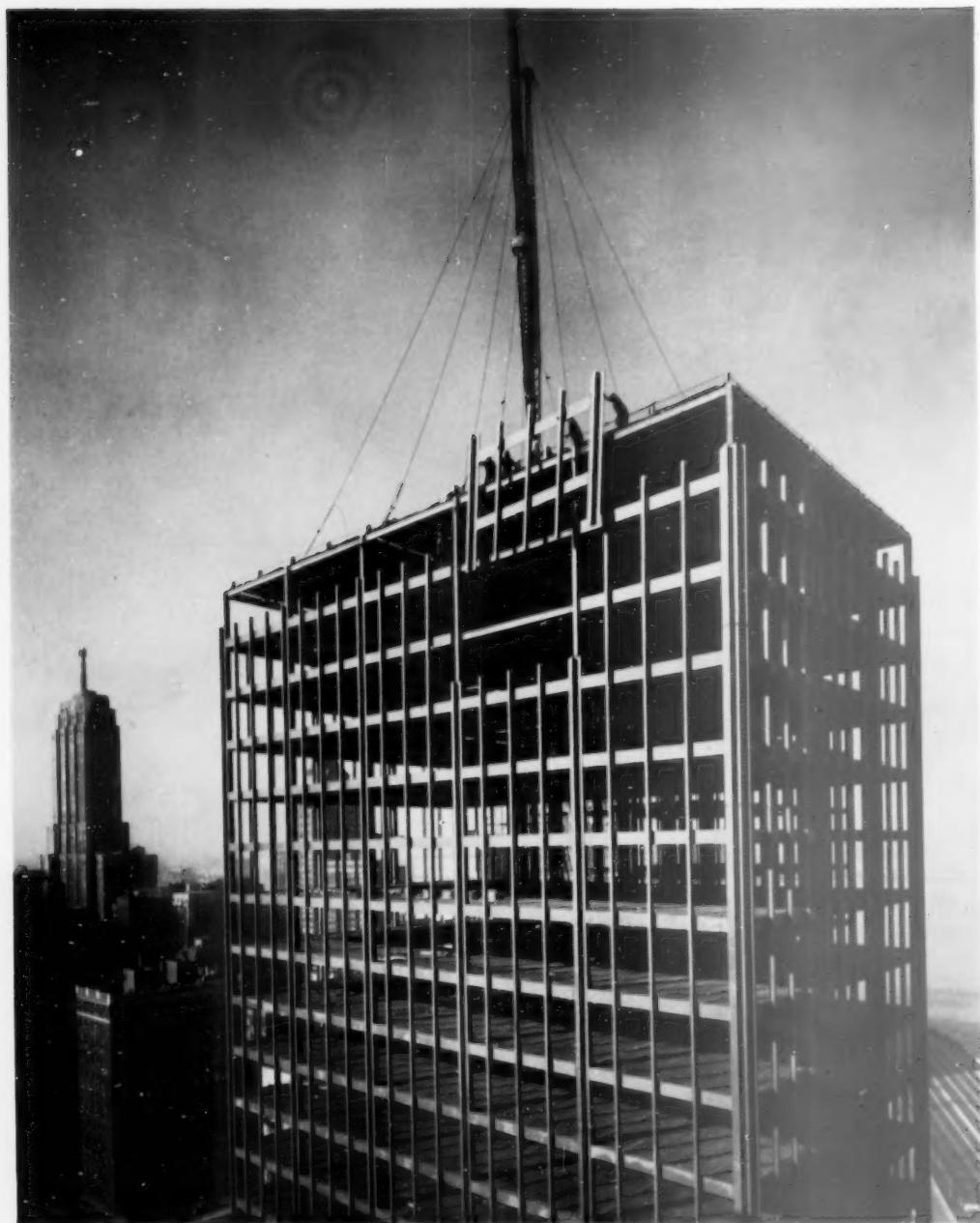
Sales Offices:

LONDON: GLASGOW · BELFAST · BIRMINGHAM
NEWCASTLE · LIVERPOOL · SHEFFIELD · CARDIFF
MANCHESTER · EXMOOR

Agents in most countries throughout the World.



Supplement to THE ARCHITECT and Building News, 8 April 1954



WALL DETAILS, LAKE SHORE DRIVE APARTMENTS

ARCHITECT: MIES VAN DER ROHE



BROADGATE HOUSE, COVENTRY *D. E. E. Gibson, C.B.E., M.A., A.R.I.B.A., M.T.P.I.
City Architect & Planning Officer*

HOPE'S HOT-DIP GALVANIZED WINDOWS

HENRY HOPE & SONS LTD

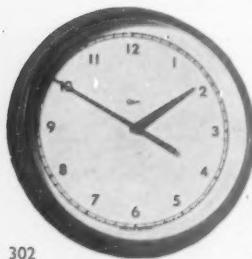
SMETHWICK, BIRMINGHAM & 17 BERNERS STREET, LONDON, W.1
LOCAL OFFICE: 319 BROAD STREET, BIRMINGHAM, I



303



749



302



421

THE CLOCK ON THE WALL

No longer an afterthought, the clock on the wall is often planned with the wall itself, as integral a part of a new building as, say, its lighting system.

As one clock on one wall, or as a hundred 'Slave' clocks on a hundred walls, synchronized to a 'Master', Gibson clocks are specified at the blueprint stage, for hospitals, schools, factories, or wherever accurate time-recording is a necessity.

Because they are worked off batteries charged from the mains, these clocks are aloof from power cuts. The available designs are varied and good—special designs can be carried out.

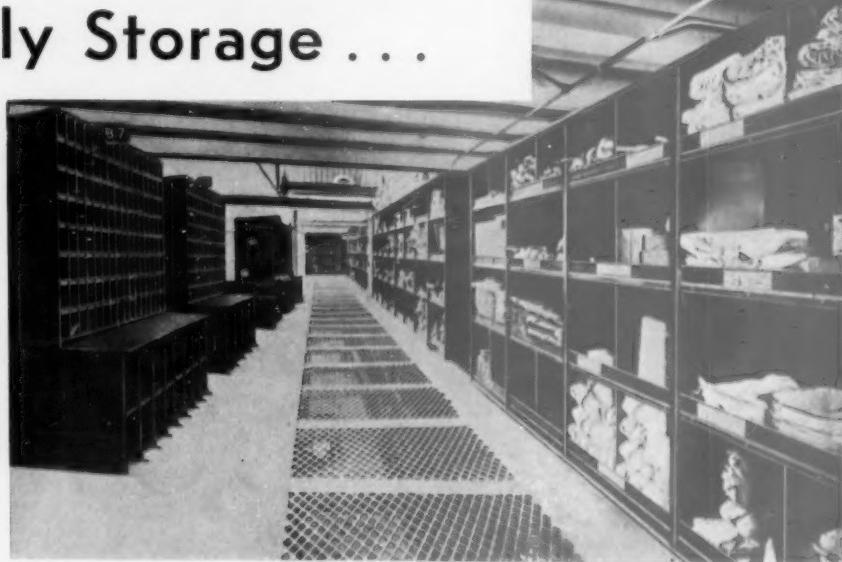


1, HATTON GARDEN, LONDON, E.C.1. CHANCERY 4331

Gibson
CLOCKS
are made by—
BAUME & CO. LTD

For Orderly Storage . . .

ORDERLINESS and efficiency go together. Harvey Steel Storage Equipment provides a solution to every problem of storing materials, components and finished goods in an orderly manner. Well designed, readily adjustable, strong and durable, Harvey Equipment embraces bins, racks and shelving planned to meet the special needs of every trade and industry.



Please ask for Catalogue No. A 775.

G. A. HARVEY & CO. (LONDON) LTD.,
Woolwich Road, London, S.E.7
Telephone: GREENwich 3232 (22 lines)

Harvey

STEEL STORAGE EQUIPMENT

THE BRITISH ARCHITECTURAL GUILD

Some Notes on the Legal Aspects of a Trade Union

THE formation of the British Architectural Guild presents to employed architects an opportunity of joining a Trade Union which, to many of them, would constitute a new adventure. Of course, architects who are employed by Local Authorities may already have had experience of membership of the National Association of Local Government Officers. The formation of a Union for the purpose of improving the conditions of employed architects will arouse interest in the minds of all those who are qualified for membership, particularly in view of the necessary inadequacy for this purpose of the existing institutions. The fact that the new Guild is a Trade Union may, however, cause some hesitation, if only on the grounds that trade union membership might appear superficially to conflict with professional status. It is the purpose of this article to explore the implications of trade union status in connection with the Guild.

It should be said at once that a Trade Union for members of a profession is not a new departure. N.A.L.G.O. includes in its membership a number of Local Government Officers who belong to professional bodies. The British Medical Association discharges some of the functions of a union for doctors who are members of the Health Service. There is a Musicians' Union, and many school-teachers belong to Unions which are organized for their profession. The adoption by non-manual workers of trade union methods is a recognition of the value of organized activity in the field of wage fixing, and securing generally better working conditions. Moreover, the regulation of conditions of employment is not the sole function of a union. There is also, for example, the provision of legal aid and benefits, and the promotion of the technical and general education of members.

It should not be supposed that the adoption of a name in which the word "Union" does not appear in any way affects the status of the new body. There is no magic in the names. Paragraph 1 of the rules (which were published in the *A. & B.N.* of March 25 last), provides that the Guild is to be registered as a Trade Union. The statutory definition of a Trade Union requires that it should have among its principal objects "the regulation of relations between workmen and masters . . . or the imposing of restric-

tive conditions on the conduct of any trade or business, and also the provision of benefits to members." The Courts have always interpreted the terms "workmen" and "masters" widely to cover any type of employment. It is the object of the Union and not its membership which is important. A reference to Rule 3 of the rules of the Guild will make it immediately apparent that the requirements of the definition are complied with. So far as classification is possible, it may be said that the Guild is a Craft Union, the distinguishing features of which are that it draws its membership from one particular occupation whose members may be employed in a number of different kinds of service whether in conjunction with members of other occupations or not. Historically, Craft Unions were the earliest to secure an effective status for themselves, though nowadays most of the larger unions either draw their members all from one industry or throw their doors open generally to employed persons regardless of their occupation. Neither the fact that the Guild is a Craft Union nor the fact that its membership is professional makes any difference to its legal status. The only generalization which it is possible to make is that unions formed of non-manual workers tend to be those which remain outside the scope of the T.U.C.

Rights and Obligations

To analyse the rights and obligations of members of the Guild it is therefore necessary to look at the rules and particularly Rule 3 which contains the objects. The Courts have regarded the objects of a Trade Union as having much the same effect as the objects clause in the Articles of Association of a Company. The union must not exceed the powers given to it by its rules. If it does, the Courts will, in some circumstances, interfere. Section 4 of the Trade Union Act, 1871, prevents the direct enforcement by the Courts of the rules of a union. Nevertheless, the Courts have granted injunctions to restrain officers from applying the funds of the union contrary to the rules. Again, where a member is threatened with expulsion otherwise than in accordance with the rules the Courts will interfere; but no damages can be recovered by the member. The rules thus have great importance, and should be carefully studied. Paragraph 3 (i) deals with the control

of relations between members and their employers. Such control implies something more than mere bargaining or submission to arbitration. It involves the right to take action to prevent the employment of non-members (sometimes referred to as the "closed shop"), and to conduct disputes between members and their employers and, if necessary, to enforce control by striking. The use which is made of the powers contained in this sub-paragraph depends on the policy of the Council. It must be assumed that they would be exercised reasonably and with the restraint proper to the case. There is no direct use of the word "strike" in the rules. There are no provisions authorizing the Council to serve strike notice on behalf of the members, or governing the circumstances in which a strike might be called. Rule 3 (x), however, would seem to authorize the payment of financial assistance to members in circumstances which resemble the provision of strike pay or victimization benefit. Any alarm which might be felt at the existence of the powers mentioned above must be tempered by the presumed reasonableness of their exercise, and by the general consideration that extreme measures are essentially only a last resort after more restrained methods of control have failed. As the rules now stand, there is no indication of any intention to affiliate with the T.U.C., and, as already indicated, affiliation would be an unusual step for this kind of union. There is, therefore, no apparent danger of members finding themselves involved in sympathetic strikes, or in a general strike should one ever occur again.

The possibility of applying the closed-shop principle needs examination. It is, of course, the object of all unions to seek to consolidate their influence over employers by drawing the maximum number of employees eligible for membership into their fold. It is only thus that negotiations with employers can be really effective. In large unions this result can be obtained by threatening to withdraw labour from employers who insist on employing non-union labour with the object of extracting a satisfactory agreement from them. It is difficult to see how this principle could be applied to a profession whose members are employed in small numbers by so many different persons and bodies. A measure of effectiveness might how-

ever be gained in the field of Local Government work. If such a policy could ever be completely effective it would take a long time to achieve success. The fact remains that the rules would seem to permit such action. It should perhaps be emphasized that Rule 3 (vi) is not an application of the closed shop. That subparagraph does not seek to restrict employment to union members but to "persons possessing adequate qualifications." The remainder of the objects are concerned with matters which might easily come within the province of any professional organization.

Paragraph 5 of the Rules deals with membership of the Guild. The Council (which is the governing body of the Guild) or a committee of the Council may refuse to admit a candidate for membership without giving reasons ("Direction" in sub-paragraph (ii) would seem to be a misprint for "discretion"). By sub-paragraph (iii) the Council can expel a member, "if they think fit." There must be a two-thirds majority of those members of the Council present and voting (not necessarily of the whole Council) in favour. Expulsion must be preceded by an investigation of the member's conduct at which he must be given the opportunity of stating his case and calling witnesses. Although the circumstances justifying expulsion are not defined, the Courts would doubtless hold that they are governed by the earlier words in the sub-paragraph which direct that investigation may take place where the Council has reason to believe that a member's conduct is contrary to the interests of the Guild. The power to control admission and expel is a very important one. If anything in the nature of a closed shop could be achieved, it would be tantamount to loss of employment for the expelled member. At the least it might be difficult for him to find employment with a person or body where Guild members were employed. The right to appear before the committee reflects a principle which would be enforced by the Courts even in the absence of a specific provision in the rules. In this connection, too, the safeguard lies in the restraint and fairness which is to be expected from the Council. In any event, the expelled member can seek re-election (Rule 5 (v)), though his application could then be rejected by a straight majority of the Council or Committee.

With regard to paragraphs 6, 7 and 8, dealing with subscriptions, it is only necessary to say that no action could be brought against a member to enforce payment. It is therefore obviously necessary to have a provision dealing with automatic expulsion in

case of default. The rules as to benefits and legal aid have yet to be drawn up by the Council. Apart from expulsion there are no other sanctions which the Council can impose.

It will be apparent from what has been written above that the Council has a great deal of power under the existing rules. It is upon their discretion, restraint and reasonableness that the reputation and success of the Guild must ultimately depend. There is no provision for an annual representative Congress empowered to perform some of the functions which have to be exercised, though such a provision is common. The Council combines the legislative, judicial and some of the administrative functions of the Guild in its maximum of 21 members. It has power to appoint committees for certain purposes, and to elect its own Chairman and the Treasurer (not necessarily from its own members apparently—see Rule 14 (i) and (ii)). It is the body which is entrusted with authority to alter the rules by a two-thirds majority (Rule 18(ii)), and to adopt rules for the provision of legal aid and benefits. The Council also defines the duties and remuneration of the Director and Secretary (Rule 14 (iii)), and appoints and removes the Trustees in whom the Guild's property is vested (Rule 15). There is no express power to appoint the Director and Secretary, but, in practice, this will be done by the Council. Under Rules 6 and 16 the Council has wide powers in connection with finance. It has already been observed that the Council, or a committee of the Council controls admission to membership and that the Council has power to expel members. The Council has extensive powers under Rule 11 concerning the formation and dissolution of branches.

In view of the extent of the Council's powers it is important to pay particular attention to its constitution which is prescribed by Rule 12. Here there is a valuable safeguard in the requirement that a third of the Council must be members of the R.I.B.A., and another third members of the I.A.A.S. This reduces the danger of an overwhelming preponderance of the representatives of one professional body. The Council is elected for one year, and its members are eligible for re-election. There is no provision whereby the members of the Guild can, under the rules, rid themselves of a Council with whose policy they are at variance before the end of the year. Regulations for the holding of elections and receipt of nominations are to be devised by the Council. It is difficult to see how the first Council is to be elected, since, until there is an election, there will be no Council to make these regulations.

The rules will have to be cleverly drafted to secure the necessary minimum proportions of members of the bodies referred to above. It is submitted that it would be more satisfactory to make provision in the rules for the regular holding of a representative congress of the members of the Guild, or a general meeting, with power to call extra-ordinary meetings if necessary; and that the congress, or the members in meeting, should have power to terminate the office of Council members and the officials by a majority. Some of the Council's powers under the present rules, e.g., the power of altering the rules, might also be transferred to the larger body. It should be pointed out, of course, that there is nothing essentially undemocratic in the vesting of such wide powers in the Council since the members of that body are all elected but it would seem unwise to repose so much confidence in a small body of persons whose opinions will necessarily be unknown to most of the electors before election, without retaining the power to dismiss them if the occasion should arise. Ultimately the proper safeguard lies in the serious exercise by each member of his right to vote, and the conscientious attendance by Council members at all meetings whenever possible.

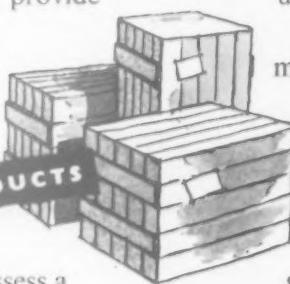
It will be observed that Rule 20 provides that there shall be no political fund or levy. It is extremely unlikely that there would be any move to alter that rule. In any event it is provided by statute that such an alteration would require a ballot of the members. Otherwise under Rule 18 the rules can be altered by a two-thirds majority of the Council, subject to the rule of law that an alteration which changed the principal objects would be ineffective. If it were not for the provisions of Rule 18, a majority vote of all the members would be required before any alteration could be made. The rules as they stand at present are necessarily of an outline nature, and will be added to and altered as the need arises. Again, the exercise of the power to make these additions and alterations depends upon the restraint and good sense of the Council.

The outcome of these comments is that, so long as the Council is served by conscientious and level-headed men (and there is no reason to suppose the contrary), there is no need to fear that the affairs of the Guild will get out of hand. The question which must concern every member is whether it is wise or fair to put so much power in the hands of a small body without making provision for their supervision and, if necessary, removal. Finally, there is one other danger to which reference should be made. The Council, by

PRODUCT DEVELOPMENT and ALMINAL EXTRUSIONS



With the eyes of Industry fixed firmly on Export, it is natural that Alminal Extrusions should be widely used in British products. Produced in sections of almost any shape, they provide unusual opportunities to manufacturer. Apart from the enterprise their lightness and save time and money in machining and sub-assembly, possess a good surface finish which requires little maintenance and are supplied to close tolerances.



high strength, they



money in machining

good surface

Southern Forge LTD

IN ASSOCIATION WITH ALMIN LIMITED FARNHAM ROYAL BUCKS

MEADFIELD ROAD · LANGLEY · BUCKS

Telephone: LANGLEY 301

BUILD WITH
'ALMINAL'
EXTRUSIONS

ALUMINIUM AND ALUMINIUM ALLOY EXTRUSIONS, TUBES AND FORGINGS



Above Ground with B.S.S. 659/1944
AND
Below Ground with B.S.S. 1386/1947
Copper Tube

Because :—

★ This is THE MOST EFFICIENT metal to metal joint with no loose rings, cones or ferrules, self-seating by means of swage or circular ridge. Made in less than half a minute as illustrated.
DOUBLE GRIP CANNOT SLIP.

★ Smaller, neater, and far less expensive than alternate methods of jointing.

For full particulars and illustrated Catalogue write to:—



British Patent No. 596673.

★ Reduces maintenance trouble to a minimum as it cannot pull off in heat or frost. Will undo and re-make.

★ Prompt delivery.

Universally approved by Government Departments, Water Works, and Local Authorities, etc.

KINGS LANGLEY ENGINEERING CO. LTD.

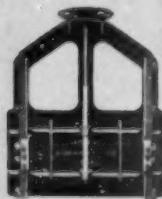
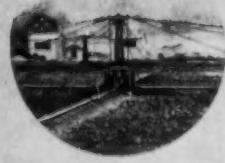
KINGS LANGLEY · HERTS

TELEPHONE : KINGS LANGLEY 2215-6

TELEGRAMS : CHAMPION - KINGS LANGLEY



"CRESSET"



We have been engaged for more than 65 years in the production of all plant and fittings for Sewage Purification and works of Sewerage. Our 'Cresset' Distributors, 'Amphistoma' Pumps, Sewage Ejectors, Penstocks, Manhole Covers, etc., are in use throughout the world. Architects are invited to send for copies of our various catalogues describing the above equipment, together with technical information.

ADAMS HYDRAULICS LTD.

YORK 2407-8-9 YORK & LONDON 8235-6 LONDON WHITEHALL

Rule 14 (iii) can assign duties to the Director and Secretary, who is the senior permanent officer of the Guild. If there should be a tendency to impose too great a burden upon the Director

and Secretary the result might well be to substitute a bureaucracy for control by an elected body. This difficulty could be surmounted by providing that the Council must meet at least at

certain stated intervals, and that the Director and Secretary must report on his activities at all meetings of the Council.

H. J. L.

Building Legislation

WHEN the Ministry of Health Byelaws were published in 1952 I commented that it was then desirable to examine the whole of the legislation affecting building which is disposed in many Acts of Parliament and causes unnecessary confusion and much waste of time and money. When the Department of Health for Scotland issued its Model Building Byelaws only a month or two ago a circular accompanied them saying that the Secretary of State realized the difficulty of securing uniform administration of building in Scotland and proposed to set up a committee to examine the associated legislation as soon as practicable. It was with great interest that I saw that this Scottish Committee had in fact held its first meeting on March 8 and considerable publicity was given to the meeting in the Press. I shall look forward to the publication of the committee's examination of the problem and its proposals for the remedy.

It may be that the position of Building Legislation is even worse in Scotland than in England and Wales but that seems to be a very poor reason why, after a period of nearly two years, the Ministry of Health has not seen its way to set up a similar investigation as it must be aware that large parts of the building industry are conscious that all is not as it should be in England and Wales.

Investigations of this sort must of necessity be long and tedious but the time within which conclusions and the consequent new legislation are required, if they are to operate before the new Model Byelaws are out-of-date or cease to operate, is by no means long, so that the sooner a start is made the better. Bodies most affected by building legislation such as the R.I.B.A., R.I.C.S. and the National Federation of Building Contractors should put their heads together and press for action to be taken. I feel sure that the new Byelaws, especially those of Scotland, are a very great advance but without supporting legislation they can neither be used effectively nor can they be still further improved.

It is probable that few of us are very aware of how much legislation affects buildings. The Public Health Act and the Building Byelaws made under it spring to mind immediately but there are local acts, Factory Acts, Petroleum Acts, Town Planning Acts, and a host of others that from time to time have an important bearing on buildings. What a simplification could be made if by depositing our drawings in one place every authority affected could see

them and we could be given one approval. In any new legislation, however, it is to be hoped that clear requirements which have to be met will be set out and that no dependence for interpretation is left with one person at a level lower than a Ministry of State. I have heard bitter complaints, although the truth I do not know, that in Scotland the Dean of Guild Court is in a position to ask for the moon if he is so inclined without having to give reasons.

In the report of the first meeting in Scotland I was slightly sad at reading that the view expressed was the desirability of achieving as much uniformity as is possible "*consistent with local requirements*." I do not believe there are any local requirements which cannot be met by properly prepared national legislation. So often one hears demands from different parts of this country and Scotland for variation to meet special conditions but most of those that I have examined arise from old local customs which should long have been abandoned. I am a little grieved to think that Scotland is making this investigation alone as it ought to be a completely national review of legislation since there can be no justification for different legislation when methods of building or the basic needs of health and safety are concerned just because one crosses a boundary between two parts of one kingdom. The differences in climate and other natural factors are negligible as the combined countries are small when compared with certain others. I am sure we should benefit as an industry by having the same legislation, regulations, byelaws, etc., throughout the whole of the United Kingdom.

In Scotland I notice organizations are invited to submit evidence as to how the present machinery is working and to express views on any defects. I hope there will not be too many who express approval of the present position because they prefer to walk in the way to which they are accustomed rather than to try for better things. I hope also some organizations, or the Department of Health itself, will be able to examine and report on the legislation and its operation which have been adopted in the more newly developed countries, such as New Zealand, Australia and Canada, as it might be possible to find more efficiency in their countries, since they have not been saddled with very archaic laws, and thus we may be able to develop something even better based on the combination of their and our experiences.

While I do not claim to have much

knowledge of building legislation in Scotland it has always seemed to appear as if the position there is much worse than it is in England and Wales where all is by no means satisfactory. These views on Scottish legislation are very well borne out by the reported remarks made by Mr. Craig Mitchell, the Deputy Secretary of the Department of Health at the first meeting of the new committee which were thoroughly supported by Mr. C. W. G. Guest, Q.C., the chairman of the committee. The latter said that the position generally was not at all consistent or satisfactory. The four cities had local Acts. In burghs most of the provisions controlling building were contained in the Burgh Police Acts but there also operated in burghs various provisions of the Housing Acts, including the power to make byelaws as to construction of houses. The Public Health Act was the main statute controlling building in the landward areas of counties.

It was gratifying that the Chairman should have said "Controls in regard to building must provide for buildings sound, safe, and healthy to occupy, but the standard must be flexible enough to allow for the development of new techniques, and it appears to me that there exists in the labours of this committee an opportunity to make a real contribution to economy in building construction, and to freeing the building industry from many of the shackles that at present bind them."

This statement indicates to me that the enquiry will be led in the direction that the building industry want to see it go if legislation is to control but not make our task difficult.

Little was reported about the Dean of Guild Court but I have been assured by Scottish architect friends that while there is much to commend this institution it can be far too autocratic and out of date so that for peace and speed of building one sometimes has to accept very undesirable directions to obtain approval of schemes.

Let us hope that this move in Scotland will prompt Whitehall to set about a similar action for England and Wales. Further, when both have made some progress in sorting out their local troubles it is to be hoped they will get together and promote new legislation which will cover building in all the three countries to ensure uniformity and thus permit manufacturers to have a single national market for their products without petty differences to accommodate local whims and fancies.

DUTCH UNCLE

MOSAICS

FITTINGS
SANITARY
C2/18

A self-contained shower cabinet with patent shower sprayer and mixing valve. Made by Charles Winn & Co. Ltd., Granville Street, Birmingham 1, it has been designed to connect to existing services and be installed without structural alterations. The "Economic" sprayer passes 1½ gallons a minute; all fittings are finished in chromium plate. The cabinet is made in sheet aluminium on a steel base. Size: height 8in, width 3in, depth 27in, and it weighs 1 cwt.



SERVICES
WATER HEATING
B6/20



The new Glow-Worm A25 Fully Automatic Boiler is claimed to give a top output of 20 gallons of very hot water every 24 hours for kitchen and bathroom. Radiators can be used to take up part or all of this output. This performance needs two fuelings per 24 hours because of the boiler's large fuel capacity.

Water temperature is controlled by a simple turn of the knob (there are no dampers to operate) and if only a small quantity of hot water is wanted in the home, the thermostat controls the A25 so that it works as economically as the smallest boiler. Fuel consumption can be as little as 8 oz. an hour.

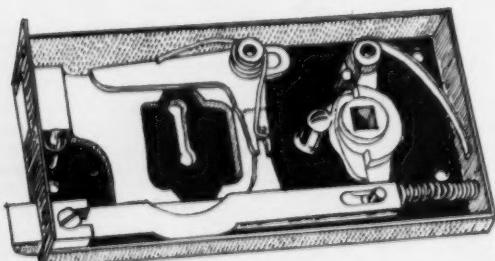
The Glow-Worm A25 burns small coke, anthracite or similar smokeless fuel and can be lit by a standard gas poker through the fire door. The ashpan has a handle and is usually emptied every two days. The fire lining is of special design to prevent clinker formation. Finish is in enamel in either cream, pastel blue, green or white. The boiler is priced at £31 9s 6d and carries a 5-year guarantee. Technical and performance details of the Glow-Worm A25 Fully Automatic Boiler are available from the makers, Glow-Worm Boilers Ltd., Millford, Derby.

PLANT
SITE EQUIPMENT
E2/11

A new magnetic signboard that has many applications in factories, workshops, on the building site for progressing, departmental co-ordination and so on. Developed by Acme Showcard and Sign Co. Ltd., it is called the Wondersign. Pat. No. 657,562. Figures, symbols, etc., are simply placed on the background to which they adhere immediately. They can be used over and over again. Wondersigns, 9 South Molton Street, W.I.



FITTINGS
DOOR FURNITURE
C3/7



The Crown Brand Easifix No. 20 Rim Lock is 6in by 3in by 2in double hand, four way with reversible easy action bolt. Two qualities are produced, solid brass and brass and steel, made by Heenan, Beddoe and Sturmy Ltd., Crown Works, Willenhall, Staffs. The latch bolt head may be reversed without dismantling the lock. There is double locking, both dead bolt and latch bolt are locked out dead by the turn of the key.

INDUSTRIAL NOTES

● Manufacturers of prefabricated buildings exhibiting at the British Industries Fair at Earls Court, London, in May, are combining as a temporary Association for the occasion. The objects of the Association are at present solely to co-operate with the B.I.F. organizers and to deal with official representatives and bodies until the Fair is over. Their first act is to issue a general invitation to the appropriate officers of all local government authorities in the country to visit the Section during the Fair, from May 3 to 14, and to inspect the latest developments in the prefabrication industry.

The space allotted to the section has been increased this year and brought down from the first to the ground floor in Earls Court.

Several complete houses and public buildings are being displayed, both for use in the United Kingdom and for the expanding overseas markets.

To ensure that all who are professionally and officially interested in prefabricated buildings have every incentive to visit the Fair, all Architects, Surveyors, Engineers and Town Planners of local authorities throughout the country are asked to write to the Secretary, Room 4, B.I.F. Prefabricated Building Association, Lacon House, Theobalds Road, London, W.C.1. He will then forward them complimentary tickets for Earls Court available on any one day of the Fair. All information and services will be available there.

The list of manufacturers of prefabricated buildings forming the Association is as follows:—Booth and Co. (England), Ltd.; Bristol Aeroplane (Weston), Ltd.; Buckwin Constructions, Ltd.; G. H. Burgess and Co., Ltd.; Cruden Houses, Ltd.; Mobile Accessories Co. (London), Ltd.; Mod-X Structures, Ltd.; Neata Products (Cheltenham), Ltd.; H. Newsum, Sons and Co., Ltd.; Reema Construction, Ltd.; and S.M.D. Engineers, Ltd.

● A new film has been made for Stewarts and Lloyds, Ltd., of Brook House, Upper Brook Street, W.I, which outlines the rapid progress made both in manufacturing techniques and in uses of tubular steel. Called "The Tubewright," the sub-title is "An Introduction to Tubular Steel Engineering," the film is an Ace Film Production produced by Frank Green.

It is available for showing free of charge and forms an interesting introduction to the many technical films made for the company. It will have worldwide distribution through the agents abroad of Stewarts and Lloyds, Ltd.

● Messrs. Philplug Products, Ltd., have moved their offices from Lancelot Road, Wembley, to Aldbury Lodge, 343, High Road, Wembley, Middlesex. The premises at Lancelot Road have been turned over entirely to production.

● Econa Modern Products, Ltd., of Shirley, Birmingham, announce that they will be opening their London office at 108, Victoria Street, London, S.W.1, in the middle of April. The telephone number is Tate Gallery 8843. The office will be in the charge of the London representative of Econa Modern Products, Mr. P. N. Bailey.

● The Solid Smokeless Fuels Federation has now moved into its new offices at 74, Grosvenor Street, London, W.1 (Tel. Mayfair 0382). The Technical Manager is Mr. A. G. Ludgator, A.M.I.H.V.E., and the Secretary Miss Joan Clarkson.

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate : (a) type of work, (b) address for application. Where no town is stated in the

address it is the same as the locality given in the heading. (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

CONTRACT NEWS

OPEN

BUILDING

ASHINGTON U.C. (a) 80 houses, Darnley Road site (all trades). (b) Engineer and Surveyor, Council Offices. (c) April 24.

BICESTER U.C. (a) Houses and flats on first part of new housing site where it is proposed to build 100 dwellings. (b) Leslie K. Watson, 6, Gray's Inn Road, London, W.C.1. (c) 3gns. (e) May 17.

BOLTON B.C. (a) Erection of Teaching Block "B," Great Lever County Secondary School. (b) Borough Engineer, Town Hall. (c) April 21.

CHATHAM B.C. (a) 50 bungalows for aged persons, Weeds Wood Estate. (b) Deputy Borough Engineer, Town Hall. (c) 2gns. (e) April 22.

CHELTENHAM B.C. (a) 10 shops with 12 maisonettes over, service roads and 8 garages, Lynworth Estate. (b) Borough Engineer, Municipal Offices, Promenade. (c) 3gns. (d) April 10.

CHURCH U.C. (a) 14 houses built in pairs, Riding Barn Estate. (b) Engineer and Surveyor, Council Offices. (c) 4gns. (e) April 17.

CRAYFORD U.C. (a) Erection of a combined 3- and 4-storey block of 31 flats, Erith Road, Bexleyheath. (b) Engineer and Surveyor, Town Hall. (c) 3gns. (e) May 3.

DAGENHAM B.C. (a) 74 houses, 14 old persons' bungalows, 8 flats (2-storey) and 19 garages, Marks Gate Estate. (b) Borough Engineer, Civic Centre. (c) 2gns. (e) May 3.

ELLESMORE PORT U.C. (a) 96 houses in blocks of 2, 4, 6 and 8, North Whitby Housing Estate, Part II. (b) Engineer and Surveyor, Queen Street. (c) 3gns. (e) April 26.

ENFIELD U.C. (a) 18 3-storey flats, Oaks Site. (b) Engineer and Surveyor, 7 Little Park Gardens. (c) 2gns. (d) April 13. (e) May 6.

GRIMSBY B.C. (a) Erection of following houses with appurtenant works of outbuildings, drainage, paths, etc.: Work No. 1, 37 houses in 3 blocks of 6, 1 block of 3 and 8 pairs; Work No. 2, 88 houses in 10 blocks of 4 and 24 pairs; Work No. 3, 100 houses in 1 block of 6, 12 blocks of 4, 6 blocks of 3 and 14 pairs; on Grange and Crowland Estates. (b) Borough Engineer, Municipal Offices, Town Hall Square. (c) £2 for each work. (e) April 22.

HECKMONDWIKE U.C. (a) 14 houses, Dale Lane Estate; (all trades). (b) Council's Surveyor, Council Offices. (c) 2gns. (e) April 23.

HEREFORD R.C. (a) 7 pairs of houses and 2 blocks of 2-storey flats, Much Birch. (b) Messrs. George Laing and Young, Newmarket Street. (c) 3gns. (d) April 12. (e) April 23.

"QUITFIRE"

Fire-proofed (Class I-B.S. 476/32 Amendment No. 2) and/or termite-proofed Fibre Insulation Board can be supplied by:—

S.O. Rudkin & Co. Ltd.
Plantation House
Mincing Lane E.C.3

MANSION HOUSE 4406 (3 lines)

Specify

CERRUX
DECORATIVE PAINTS
CELLON LTD., KINGSTON-ON-THAMES

ENCERT & ROLFE LTD
ASPHALTE WORK
LONDON E 14  EAST 1441

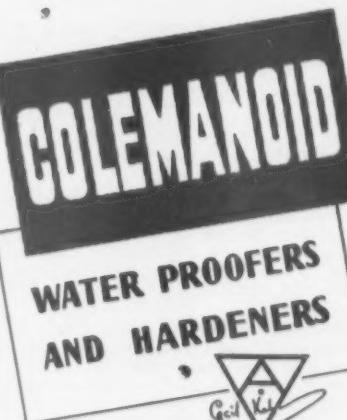
Save Bricks by using
TRUE FLUE
STACK CONSTRUCTION
TRUE FLUE LTD
CONVECTOR HOUSE - ACACIA ROAD
ST. JOHNS WOOD - LONDON - N.W.8

MULLEN
AND
LUMSDEN
LIMITED

Contractors and
Joinery Specialists

41 EAGLE STREET, HOLBORN,
LONDON, W.C.1.

Telephones:
LONDON: CHancery 7422/3/4 CROYDON: ADDiscombe 1264



THE ADAMITE COMPANY LIMITED
MANFIELD HOUSE, STRAND, W.C.2

KINNEAR

SHUTTERS



A. & P. STEVEN LTD

"APS"
LIFTS

181 ST. JAMES ROAD, GLASGOW, C.4

Tel: Bell 0356

LONDON: 10 Nicholson St., S.E.1. Tel. Waterloo 4465

MANCHESTER, 1: 12 Charles St. Tel. Ardwick 1391

EDINBURGH, 2: 2 North West Circus Place. Tel. Edin 27998

BIRMINGHAM, 18: 63 Hockley Hill. Tel. Northern 1266

HUNTINGDON R.C. (a) 3 bungalows, Molesworth. (b) K. A. Milner, of Messrs. Lea, Milner and Wardley, 4, Market Hill. (c) 2gns. (e) April 21.

LEEDS REGIONAL HOSPITAL BOARD. (a) Alterations to existing building to provide accommodation for a mass radiography unit at St. James's Hospital, Beckett Street, Leeds, 9. (b) Architect to the Board, Park Parade, Harrogate. (c) 2gns. (d) April 14. (e) May 5.

LEEDS C.C. (a) Contract No. 568. Public conveniences, Oakwood Junction, Roundhay. (b) City Architect, Priestley House, Quarry Hill, 9. (c) £2. (e) April 21.

LINCOLNSHIRE C.C. (a) House and set of farm buildings on each of following holdings: Bourne Nos. 116 and 184; Thurby No. 144; Morton No. 176. (b) County Land Agent, County Offices, Sleaford. (e) April 24.

LONDON—STEPNEY B.C. (a) (1) Erection of blocks 1, 2, 3 and 4, being 2 blocks of 5-storeys, 1 block of 5- and 8-storeys and 1 block of 5- and 7-storeys, comprising 141 dwellings; (2) execution of following sub-contract works:—(1) heating and hot water installation; (2) cold water services and sanitary plumbing; (3) lifts; (4) metal windows; (5) lightning conductors; (6) drying cupboard fittings; Sidney Street Housing Scheme, Portion "C." (b) Messrs. Sydney Clough, Son and Partners, Devonshire Close, 39, Devonshire Street, London, W.I. (c) 2gns. (e) May 17.

LUTON B.C. (a) A temporary slaughter house, Windmill Road site. (b) Borough Engineer, Town Hall. (c) 2gns. (e) April 23.

MANSFIELD B.C. (a) Central water works depot, Great Central Road. (b) Borough Engineer, Carr Bark. (c) 2gns. (e) April 22.

MERTHYR TYDFIL B.C. (a) (1) 181 houses at Gurnos, Merthyr Tydfil, and (2) 20 houses at Diana Street, Troedyrhau. (b) Borough Engineer, Town Hall. (c) 5gns. (e) April 21.

NEWCASTLE-UPON-TYNE C.C. (a) (1) 12 flats in 3-storeys, Tasset Street Site, and (2) 9 flats in 3-storeys, Buckingham Street Site. (b) City Architect, 18, Cloth Market, 1. (e) April 22.

N. IRELAND — NEWTOWNARDS B.C. (a) 17 houses and 4 flats with site works, etc., Scrabo Road. (b) Town Clerk, Town Hall. (c) £3 (e) April 21.

NORTHLEACH R.C. (a) 11 houses, Eastleach. (b) Clerk of the Council, Council Offices. (c) 2gns. (e) April 20.

NORTH RIDING C.C. (a) A new County Primary School, Northallerton. (b) County Architect, County Hall, Northallerton. (e) May 3.

NORTH RIDING C.C. (a) An infant welfare centre at Guisborough. (b) County Architect, County Hall, Northallerton. (c) 2gns. (d) April 14.

NORWICH C.C. (a) 253 dwellings, Heartsease Housing Estate, Norwich, in 7 groups varying from 20 dwellings to 56 dwellings. (b) City Architect, City Hall. (e) May 3.



VULCANITE Roofing— FOR EVERY TYPE OF ROOF

LIGHTNING CONDUCTORS J. W. GRAY & SON LTD. 13, CASTLE ST., SALISBURY Telephone: SALISBURY 2750 CHURCH SPIRE RESTORERS

London's Finest new & secondhand Value
ARCHITECTS PLAN CHESTS
Steel & Wood Office Furniture
Filing Cabinets
Safes Chairs, etc.
M. MARGOLIS
378-380 EUSTON ROAD LONDON N.W.1 Phone: Eust 1323

ENGERT & ROLFE LTD
**INODOROUS FELTS
FROM STOCK**
LONDON E 14 **E** EAST 1441

COURSES for all R.I.B.A. EXAMS
Postal tuition in History, Testimonies, Design, Calculations, Materials, Construction, Structures, Hygiene, Specifications, Professional Practice, etc. Also in general educational subjects.
ELLIS SCHOOL OF ARCHITECTURE
Principal: A. B. Waters, M.R.E., G.M., F.R.I.B.A.
1636, OLD BROMPTON ROAD, LONDON, S.W.7
Phone: KEN. 4477 and at Worcester

**ASPHALT
WORK
TO ALL R.S.S.**
COVERITE
(ASPHALTERS) LTD
PALACE GATES STN. R.12 (BIRMINGHAM 2)

**SHEET METAL
WORK**
CONSTRUCTIONS FOR EVERY ENGINEERING REQUIREMENT
J. GARDNER & CO. LTD.
ANT. HOUSE LANE BECKENHAM KENT. PHON. SYDENHAM 6000

**S
SOUNDPROOF CONSTRUCTION
LONDON N.W.2
C**
ANECHOIC CHAMBERS
SOUND DEADENING &
ABSORPTION EXPERTS
WILLESDEN 7187

PORPSMOUTH C.C. (a) (1) 88 houses, Leigh Park; (2) 132 houses, Leigh Park. (b) City Architect, Municipal Offices, 1, Western Parade. (c) £1 each contract. (d) April 15.

PRUDHOE U.C. (a) 105 houses, West Wylam. (b) Clerk of the Council, Council Offices, 18, South Road. (c) 3gns. (e) April 24.

SCOTLAND—PORT GLASGOW. (a) 46 houses, Park Farm Site (all trades). (b) Scottish Special Housing Association, Ltd., 15-21, Palmerston Place, Edinburgh 12.

SOUTHWELL R.C. (a) 16 pairs of houses, 11 pairs of bungalows; 2 blocks of 4 flats, etc., on housing site off Southwell Road, Rainworth. (b) Council's Surveyor, Council Offices, Westgate. (c) 2gns. (e) April 26.

STOCKPORT B.C. (a) 43 dwellings, Bridge Hall Estate. (b) Borough Surveyor, Town Hall. (c) 3 gns. (d) April 10.

WEST RIDING C.C. (a) A children's home at 85, Shaftesbury Avenue, Woodlands Estate, Woodlands, near Doncaster. (b) County Architect, "Bishopsgarth," Westfield Road, Wakefield. (c) 2gns. (e) May 3.

WEST RIDING C.C. (a) A children's home at Stonehill Rise, Scawthorpe Estate, Bentley, near Doncaster. (b) County Architect, "Bishopsgarth," Westfield Road, Wakefield. (c) 2gns. (e) May 3.

WEST SUSSEX C.C. (a) Adaptation of the depot and stores at The Wharf, Midhurst, to form a two-bay part-time fire station. (b) County Architect, County Hall, Chichester. (d) April 14.

WORKSOP B.C. (a) 50 bungalows at Valley Road area. (b) Borough Engineer, Park House, Park Street. (c) 5gns. (e) April 19.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. ↑ denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

BLACKPOOL CORPORATION. (1) Secondary school. (2) Mereside. (3) Atherton Bros. (Blackpool), Ltd., 70, Peter Street, Blackpool. (4) £127,472.

CROYDON B.C. (1) 98 houses. (2) New Addington Estate. (3) Wates, Ltd., 1258, London Road, Norbury, S.W.16. (4) £145,762. (1) 68 houses. (3) Grace and Marsh, Ltd., Waddon, Croydon. (4) £102,033.

CONSETT, DURHAM. (1) Grammar school for C.C. (2) Consett. (3) R. Gallacher, Ltd., Blackhill, Co. Durham. (4) £220,000.

N.E. METROPOLITAN REGIONAL HOSPITAL BOARD. (1) Two villas. (2) South Ockendon Hospital. (3) H. Dowling and Son, Maverton Road, London, E.3. (4) £70,274.

LAMBETH B.C. (1) 321 dwellings. (2) Studley Road. (3) J. Jarvis and Sons, Ltd., 239, Vauxhall Bridge Road, S.W.1, and M. J. Gleeson (Contractors), Ltd., London Road, Cheam, Surrey. (4) £467,965 and £196,647 respectively.



Single and Multi-Storey Reinforced Concrete Integrated Construction

Designed to
Individual
Requirements

Unrestricted
Span

Maintenance
Eliminated

Fire Risk
Reduced



Sectional Factory at Stevenage. Archt.:— Chief Archt Stevenage Dev. Corp.

Telephone :
VIC 0336-8.

Write or 'phone **R. E. EAGAN LIMITED**
1, ASHLEY PLACE, VICTORIA STREET, LONDON, S.W.1.

Telegrams :
Lambda, Sowest.

An expert to help with your **TRANSPORT PROBLEMS**

Are you in touch with technical and commercial developments in road transport? Do you know what steps are being taken, by a thousand and one go-ahead undertakings, to speed and cheapen the movement of goods and materials? Can you say how the latest transport legislation will affect you? The answers to these and many more questions are in **MOTOR TRANSPORT**, the wide-awake newspaper for road transport users. Every Friday it can bring *your* transport executives a wealth of new ideas and up-to-date information on the whole subject.

Order from your newsagent or take advantage of the special trial offer below.

Introduction to a specialist—POST NOW

MOTOR TRANSPORT

— keeps you on the right road

To : Hiffe & Sons Ltd., Dorset House, Stamford Street, S.E.1.

I wish to take advantage of your trial offer of 12 issues of **MOTOR TRANSPORT** for which I enclose only 17/6d, postage being paid by the publishers (Normal subscription 26/- including postage).

Name

Address

If preferred, order from your newsagent, every Friday, 4d.

Windows for all weathers

ADDING DISTINCTION,
GIVING MORE LIGHT AND EASY
CONTROL OF VENTILATION

Cool in summer, snug in winter, Naco Louvre Windows give you fingertip control of draught-free ventilation. They bring more light and natural ventilation to interiors — they are easy to clean and will not rattle. Strong, safe and trouble-free in use.

Naco Windows are weatherproof too — the patent Naco safety lock clamps the louvre blades completely tight, preventing opening from outside.

- No other window gives you so many modern advantages — yet NACO windows are inexpensive to instal and to maintain, and are easily fitted by unskilled labour.

Write now for fully descriptive leaflet to Dept. ABI



ADJUSTABLE AIR CONTROL

Louvre Windows

Sole Concessionaires :

HENRY GARDNER & CO. LIMITED
2 Metal Exchange Buildings, London, E.C.3. Mansion House 4521

A STANLEY outfit for the Draughtsman

- Drawing Board Stand made in Ash, stained light finish. Adjustable for height and angle as required.
- Double Elephant Drawing Board (42x29 inches) with grooved back, slotted edges, and Gun-Metal edge adapted for Clamping Tee-Square.
- Ebony-Edged Clamping Tee-Square allowing board to be used on an incline. It is fitted with a small slot and clamp at the end of the stock to permit the blade to be set to the drawing.



PRICE COMPLETE:-
£18. 15. 0.

W. F. STANLEY
& CO. LIMITED

Head Office and Works:-
NEW ELTHAM,
LONDON, S.E.9

Showrooms:-
79/80 High Holborn,
London, W.C.1



STRUCTURAL FIRE PROTECTION

with DURASTEEL composite Steel-&

Asbestos Fire Protection Panelling

Above shows part of extensive subdivision and fireproof cladding by DURASTEEL in projection rooms of National Film Theatre, South Bank, Waterloo.

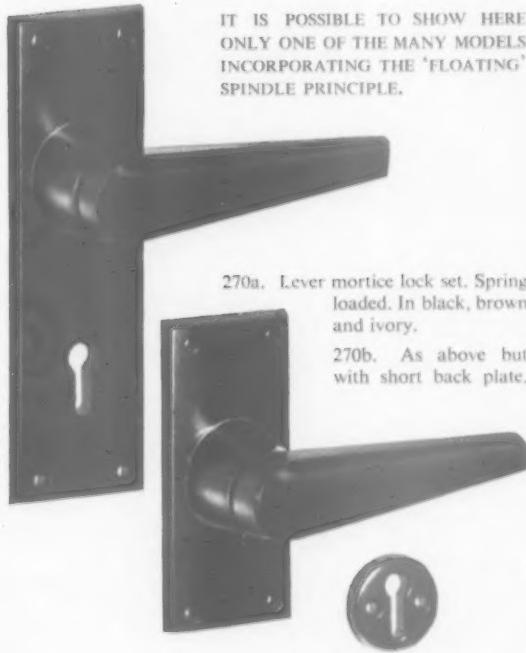
DURASTEEL
LTD.,
Oldfield
Lane
Greenford
Middlesex
Waxlow 1051

The "floating" spindle principle means added convenience and beauty



This patented device eliminates the use of grub screws. It ensures an exact and rattle-free fitting, automatically adjustable to any normal door thickness.

The diagram above illustrates the principle—the knob or lever rotates about the neck, which is moulded in one piece with the rose or back plate, which in turn is secured by screws to the door. The spindle engages with square holes inside each knob or lever.



A selection of Lacrinoid door furniture is now on display at the Building Centre, 26 Store St., W.C.1.

LACRINOID

TRADE MARK

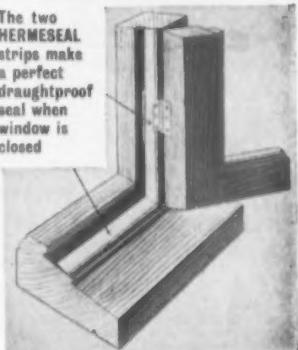
LACRINOID PRODUCTS LTD., GIDEA PARK WORKS, ROMFORD, ESSEX
Telephone: HORNCHURCH 2981 Telexgrams: LACRINOID, ROMFORD
McN479

Two ways to HEAT CONSERVATION

1 DRAUGHT EXCLUSION

will reduce the loss of heat through the average window by at least *half*, and through doors by an even greater amount. The actual rate of cold-air infiltration, the source of all draughts, can in turn be reduced by anything up to 95%, according to type of construction.

The two HERMESEAL strips make a perfect draughtproof seal when window is closed



EXAMPLE: D/H Sash Windows of wood, 5' 2" x 2' 8", average length and width of gap, 18' 0" x 1", average wind speed 10 m.p.h.

BEFORE draught-exclusion	= 1908.0 cu. ft. per hr.
AFTER	= <u>264.6 cu. ft. per hr.</u>
PREVENTION achieved	= <u>1643.4 cu. ft. per hr. or 86.1%</u>

2, ROOF INSULATION

will reduce the loss of heat through a roof-area by *at least 70%*. This loss, in the average house, is about *one-third* of all the heat lost in various ways from the structure as a whole.



EXAMPLE: Average "U" values of a number of Pitched roofs of NEW but varying construction. "U" = B.Th.U/sq. ft./hr./1 deg. F.

BEFORE insulation (Desirable standard 0.20) = 0.43

AFTER insulation by 1" bitumenised glass wool = 0.13

PREVENTION achieved = 0.30 or 69.7%

Specify DRAUGHT EXCLUSION and ROOF INSULATION by HERMESEAL. No higher degree of efficiency in the conservation of heat and the saving of fuel can be achieved in any already existing building. Surveys and installations are carried out by our own skilled staff throughout the country. Write for full details.

draught exclusion & roof insulation by
HERMESEAL
means warmer homes

BRITISH HERMESEAL LIMITED

Head Office: 4 PARK LANE, LONDON, W.I.

Telephone: GROsvenor 4324 (5 lines)

OFFICIAL APPOINTMENTS

Rate 1/6 per line, minimum 3/-

APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order 1952.

ISLE OF ELY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the under-mentioned appointments on the Staff of the County Architect:

- (a) ASSISTANT ARCHITECT; Grade A.P.T.V. (£620-£670).
- (b) ASSISTANT QUANTITY SURVEYOR; Grade A.P.T. III (£550-£595).
- (c) ENGINEERING ASSISTANT; Grade A.P.T. I (£490-£535).
- (d) JUNIOR ARCHITECTURAL ASSISTANT (Temp.); Grade Misc. I/II/III (£320-£460).

All posts with the exception of (d) are permanent, and all are subject to the National Scheme of Conditions of Service, the Local Government Superannuation Act, and to the passing of a medical examination.

Intending applicants should apply for forms, stating for which post they wish to apply, to the County Architect, County Hall, March, to whom they must be returned not later than Saturday, 24th April, 1954.

R. F. G. THURLOW,
Clerk of the County Council.
[7813]

TOTTENHAM BOROUGH COUNCIL

ARCHITECTURAL ASSISTANT, Grade A.P.T.II, III or IV (£520 to £565, £550 to £595 or £580 to £625; plus London Weighting of £20 or £30 according to age, N.C.C. conditions of service. Salary according to qualifications and experience.

DRAUGHTSMAN, Grade A.P.T.I. (£490 to £535), plus London Weighting of £20 or £30 according to age. Candidates should have had experience in the office of an Architect or Surveyor.—Write to Borough Engineer, Dept. A.B.N., Town Hall, Tottenham, N.15, for application form and further particulars. Completed applications to be delivered by Tuesday, 20th April, 1954. [7829]

CITY OF LIVERPOOL

EDUCATION COMMITTEE

COLLEGE OF BUILDING

Clarence Street, Liverpool, 3

Principal: T. E. Hall, Dip. Arch., A.R.I.B.A.
APPLICATIONS are invited for the appointment of SENIOR LECTURER in ARCHITECTURE, Department of Building and Professional Studies. Duties to commence 1st September, 1954. Salary: £1,040 x £25 to £1,190 p.a. (Men) £832 x £20 to £952 p.a. (Women).

The College offers Part-time Day and Evening Courses in Architecture leading to the Final Associateship Examinations of the R.I.B.A., and the person appointed will be responsible to the Head of the Department for the organization and conduct of these courses.

Applicants must possess a degree or graduate qualification in architecture, professional experience in a responsible position, and teaching experience. Experience in the organization of Architectural Courses will be an advantage.

Application forms (and further particulars) obtainable from H. S. Magnay, M.A., Director of Education, 14, Sir Thomas Street, Liverpool, 1, should be returned to him within three weeks of the appearance of this advertisement.

THOMAS ALKER,
Town Clerk and Clerk to the Local Education Authority (JA.3505).
[7827]

PERTH AND KINROSS JOINT COUNTY COUNCIL require one SENIOR ASSISTANT ARCHITECT. Salary £660-£770 with placing. House available. Applicants must be fully qualified A.R.I.B.A. and have up-to-date experience of School Building work. Particulars and forms of application from the County Clerk, County Offices, York Place, Perth. Applications to be lodged by 26th April, 1954. [7828]

ANNOUNCEMENTS

• CONTRACTS • TENDERS

Close for press 1st post Monday for following Thursday Issue

APPOINTMENTS—contd.

BOOTS PURE DRUG CO., LTD., NOTTINGHAM.

ARCHITECTS DEPARTMENT.

APPLICATIONS are invited for the appointment of six ASSISTANT ARCHITECTS or ARCHITECTURAL ASSISTANTS to the permanent staff of the above department, which is expanding. Applicants should preferably have had several years' experience in an architect's office and be capable of carrying out a job from sketch plan to building stage. Thorough knowledge of building construction and ability to prepare neat, accurate working drawings and attractive sketch plans are essential.

The department has in hand works of a very varied nature including retail shops, alterations and extensions to shops, laboratories, factories and office buildings. Permanent and progressive appointments for the right men who may be required occasionally to visit building works in progress in all parts of the British Isles.

Successful applicants, who must have completed or have been excused their obligatory National Service, will be required to pass a medical examination and to join the Company's pension scheme after not less than six months' satisfactory service. The working week is five days.

Applications will not be considered unless made on the appropriate form which may be obtained from—Chief Architect, Boots Pure Drug Co., Ltd., Station Street, Nottingham. [7837]

LONDON COUNTY COUNCIL ARCHITECTS DEPARTMENT

VACANCIES FOR ARCHITECTS IN Schools and Housing Divisions. Salary to £721.

Particulars and application forms from Architect (AR/EK/A/3), County Hall, S.E.1. (374) [0141]

ANNOUNCEMENT

T. McEWAN PORTER, A.R.I.B.A., A.A.Dip. (Hons), and Peter Wakefield, A.R.I.B.A., associates of the late G. Blair Imrie, M.B.E., F.R.I.B.A., of Teffont Magna, Salisbury, have formed a partnership to continue his practice and that of B. Wakefield & Son, of 18, Orchard Street, Bristol, 1. They will continue to practice from the same address pending the establishment of a combined office. [7825]

MISCELLANEOUS SECTION

RATE : 1/6d. per line, minimum 3/-, average line 6 words. Each paragraph charged separately.

BOX NOS. add 2 words plus 1/- for registration and forwarding replies which should be addressed c/o, "The Architect & Building News," Dorset House, Stamford Street, London, S.E.1.

PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

No responsibility accepted for errors.

ARCHITECTURAL APPOINT- MENTS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order 1952.

ARCHITECT'S Assistant required, intermediate standard or above.—Apply stating age, experience and wages required to Wilfrid C. Mangan, Chartered Architect, 2, Ribblesdale Place, Preston. [7834]

ARCHITECTURAL Assistant required in busy City Office. Must be quick and accurate. Salary according to age and experience.—Apply to Westmore & Sanders, 121, Cheapside, E.C.2. Monarch 3337. [7830]

ARCHITECTURAL APPOINT- MENTS VACANT—contd.

ASSISTANTS required about Intermediate Standard or over.—Apply, giving full details, to R. J. Beswick & Son, F.R.I.B.A., 10, Victoria Road, Swindon, Wilts. [7826]

ARCHITECTURAL assistant, 20/25, required in Architectural Department of H. & G. Simonds, Ltd., Reading. Applications, marked Confidential, stating age, experience and salary required, to be addressed to R. E. Southall, Chief Architect, The Brewery, Reading. [7844]

ARCHITECTURAL Assistants required; applicants should have completed their National Service and have had at least two years' office experience.—Apply in writing, stating age, training and experience, to the Chief Staff Architect, Olford Limited, Momford, Essex. [7836]

TWO Architectural Assistants required for Architect's Office in West End of London. Sound knowledge of construction and preparation of working drawings and details, preferably with experience of industrial and office buildings. Apply stating age, qualifications and salary desired. Box 4640. [7833]

DESIGNING Architect (experienced) is required by a large Melbourne firm of Architects to take charge of design and preparation of drawings for industrial and City building work. Salary according to qualifications and experience. Successful applicant may apply for Government assisted passage.—Reply in own handwriting to Box No. 931, c/o Dawson's, 129, Cannon St., E.C.4. [7832]

APPLICATIONS are invited for the following posts on the permanent staff of a leading oil company:—

(a) One ASSISTANT ARCHITECT. Starting salary £600-£700 per annum, according to experience and ability. Applicants should be Associates of the Royal Institute of British Architects or should have reached final standard, with sound practical experience, including levels, specification writing, supervision and control of contracts.

(b) One ARCHITECTURAL ASSISTANT. Starting salary £500-£650 per annum, according to experience and ability. Applicants should have passed the Royal Institute of British Architects Intermediate Examination and should have sound practical experience.

The work includes several large projects, laboratories and other technical buildings, offices, canteens, garages and service stations throughout the country. A thorough working knowledge of construction and contemporary design is essential. The posts are progressive and pensionable.

Applicants should reply, giving full particulars, including whether they have completed their National Service, to Box 4624. [7831]

SITUATIONS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order 1952.

SMALL quantity surveyor's office in Westminster have vacancy for worker-up with experience who is keen to make progress. Post offers opportunity for gaining general experience, including site work.—Please apply in writing, Box 4645. [7842]

ARTIST required to produce series of perspective sketches for publication. Technique to be simple and suitable for reproduction. Samples of work and charges to S. Morrison & Partners, Full St., Derby. [7846]

SURVEYOR required. Young man with previous experience of billing, site measurement, measurement of sub-trades and contractors.—Apply in confidence, stating age, experience and salary required, to General Manager, H. C. Wakefield, & Sons, Ltd., Whitson St., Bristol, 1. [7841]

PRESS NOTICE

For the issue of "The Architect and Building News" dated 15 April, classified advertisements must reach us by 1ST POST, FRIDAY, 9 APRIL. For the issue dated 22 April, classified advertisements must reach us by 1ST POST, THURSDAY, 15 APRIL.

SITUATIONS VACANT—contd.

WANTED immediately by Dorman Long & Co., Ltd., Middlesbrough, a temporary experienced Chartered Quantity Surveyor (period of employment not less than three years). State Salary expected. Applicants should state age, training, qualifications, etc., with testimonials to Dorman Long & Co., Ltd., Central Engineering Department, Middlesbrough, marking envelopes "Surveyor." [7806]

PLANT FOR HIRE

CHASESIDE mechanical shovels, Major type, by day, week or contract, with drivers; tipping lorries supplied if required with shovels.—Henry Froud, Ltd., Primrose Wharf, Tunnel Ave., Greenwich, S.E.10. Tel. Greenwich 0072-3. [0138]

FOR hire, steel scaffolding; yours for hire for £7.5s per month, sufficient scaffolding to erect a detached house (delivery if required), or at the following low rates: Tube 3d per ft, fittings 1d each, putlogs 3d each, scaff. boards 1½d per ft; these rates are per month; also boards, tubes and fittings bought and sold.—Kilburn & Banks, Ltd., 2, Springfield Lane, Kilburn, N.W.6. Maida Vale 2748/3578. [7789]

FOR SALE

ELECTRICITY meters reconditioned, all types, quarterly credit and prepayment.—The Electric Meter Company, Dept. AN46, Castle Circus House, Torquay. [7839]

ALL Mouldings, Plain and Embossed, and Embossed ornaments. Numerous designs—Darev's Moulding Mills, Ltd., 60, Pownall Rd., Dalton, E.8. [0086]

FOR sale Sagar 1in Spindle Moulder, table size, 32in x 32in, good condition, complete with countershaft, electric motor and accessories.—Thos. Wilkinson's Midland Rd., Sheffield. [7840]

WOOD LETTERS for shopfronts, signboards, etc. Send for Trade List "A." Prompt delivery.—J. Franks & Co., 50, Reginald St., Luton, Beds. Tel. 647. Established 1920. [7777]

OAK paneling, 48ft run, moulded, fielded panels, 7ft 8½in overall skirting and cornice. Also two doors to match with architraves.—Seen at 3, Junction Mews, W.2. Paddington 2128. [7843]

LARGE quantities of ½ broken brick for disposal cheaply. L.C.C. specification; collected or delivered ex London stock, mechanically loaded.—Apply P. T. Read, Ltd., Downs Works, Amhurst Terrace, E.8. Telephones: Clissold 6335, Amhurst 1870. [7835]

IN the matter of Wilkinsons (Runfold), Ltd. (in voluntary liquidation). Vibrating table by Fraser & Chalmers, complete as new, for sale; all inquiries to the liquidator.—A. W. Britton-Harvey, F.A.C.C.A., 37-58, Clun House, Surrey St., Strand, London, W.C.2. [7786]

WANTED

WANTED, 2 or 4 ornate ornamental pillars for internal use in ballroom, about 9-12in diameter and about 8ft high, wood or alabaster or the like.—Box 4641. [7838]

BUSINESS & PROPERTY

BUILDER'S business premises. Good stone sheds, garage, shop, loft over all. Large sheds and yard adjoining 1½ acres close. Suitable building site.—S. E. Downs-Hall, 88, High St., Marshfield, Chippenham. [7845]

INSURANCE

ARCHITECTS' Indemnity Insurance effected.

Please write for Proposal Form to

E. J. SAXBY, Incorporated Insurance Broker,
37a, Carfax, Horsham, Sussex. Tel. 994.
[7660]

NISSEN HUTS, ETC.

RECONDITIONED ex-Army huts and manufactured buildings, timber asbestos, Nissen type, hall type, etc., all sizes and prices.—Write, call or telephone Universal Supplies (Belvedere), Ltd., Dept. 32, Crabtree Manorway, Belvedere, Kent. Tel. Erith 2948. [0120]

CONTACT LENSES

MODERN Contact Lens Centre, 7 (G1), Endsleigh Court, W.C.1. Deferred terms. Booklet sent. [0140]

MISCELLANEOUS

BUDD'S for all jobbing printed account books. No book-keeping knowledge required. Rulings and headings free.—51, Teeven Road, Croydon. [7821]

DEMOLITION

DEMOLITION AND CLEARANCE

"WATCH IT COME DOWN"
By SYD BISHOP & SONS,
282, BARING RD., LEE, S.E.12. TEL. LEE
GREEN 7755.

OLD PROPERTY BOUGHT FOR SALVAGE [0139]

BOOKS, ETC.

"**GAS Welding and Cutting: A Practical Guide to the Best Techniques.**" By C. G. Bainbridge, M.I.Mech.E., M.Inst.W. A comprehensive textbook providing practical information on almost the whole range of available gas welding and cutting from all booksellers. By post 15/6 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**A GUIDE to Plastics.**" By C. A. Redfern, B.Sc., Ph.D., F.R.I.C. Explains clearly and in detail how manufactured materials for industrial use are obtained and how they are fabricated by various moulding methods into many kinds of finished articles. A series of charts traces the stages of manufacture from raw materials to finished products. 7/6 net from all booksellers. By post 7/10 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**NEW Ideas for Farm Buildings: Selected Designs for a 100-acre Farm Homestead.**" Analysed by the Association for Planning and Regional Reconstruction. This publication is based on suggestions made by many readers of "Farmer & Stock-Breeder." Their ideas have been carefully collected and analysed to provide a mine of information on various aspects of the subject. Fully illustrated with plans and diagrams. 30/- net from all booksellers. By post 30/8 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

BOOKS, ETC.—contd.

"**ELECTRICAL Who's Who.**" Compiled by "Electrical Review." Contains over 4,300 entries giving particulars of the education, careers and general activities of leading men and women in the consulting, manufacturing, contracting, trading and other branches of the electrical industry, Government Departments, etc. 12/6 net from all booksellers. By post 13/1 from The Publishing Dept., Dorset House, Stamford Street, London, S.E.1.

"**HIGH Paddington: A Town for 8,000 People.**" Designed by Sergei Kadleigh, A.A.Hons.Dip., A.R.I.B.A., assisted by Patrick Horsham. A town for 8,000 people, with all the necessary amenities, built on the goods yard of Paddington railway station; this book describes the project. Contains 20 line photographs and 16 line plans, 14 of these in colour. 7/6 net from all booksellers. By post 7/10 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**BASIC Surveys for Planning.**" Edited by the Association for Planning and Regional Reconstruction, by Jacqueline Tywhitt, A.I.L.A., A.M.T.P.I., and W. L. Waide, D.T.P.(London), A.M.T.P.I. In this book a group of specialists attempt to explain the purposes of basic surveys for planning, with the requirements of the new planning legislation in mind. A critical examination is made of how the new planning code has been applied in both town and country. 5/- net from all booksellers. By post 5/3 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**ARCHITECTURE as a Career: A Practical Handbook for Students.**" By Maurice B. Taylor, M.T.P.I., A.R.I.B.A., F.I.L.A., F.R.I.A.S., F.S.A.Scot., R.I.B.A.Dist.T.P., A.A.Dip. of Planning. Discusses the various methods of approach to the architectural profession, gives information on the various R.I.B.A. examinations, scholarships and prizes, and offers the intending architect much sound advice on every aspect of planning his career. 10/6 net from all booksellers. By post 10/11 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**CONSTRUCTIONAL Steelwork Shop Practice: A Textbook for Apprentices and Students.**" By John Farrell. (Published for the British Constructional Steelwork Association.) A practical work covering every stage of operations in this industry. Includes information on: the reading of constructional engineering drawings; the template shop; work of the plaster in marking off and assembly; processes of fabricating steelwork; inspection, checking and maintenance, etc. 15/- net from all booksellers. By post 15/6 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**PLASTICS Progress: Papers and Discussions at British Plastics Convention, 1953.**" The text of this book is based on the papers given by leading experts at the 1953 British Plastics Convention, and includes a report on the discussion which followed each paper. Providing an up-to-date record of contemporary technological developments and useful information on modern applications, the volume should be studied by every producer and user of plastic products. 50/- net from all booksellers. By post 51/4 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

"**DOMESTIC Water Heating: Basic Engineering Principles of Electric and Solid-Fuel Installations.**" By Ronald Grierson, M.I.E.E., M.I.Mech.E. A critical analysis of current practice in household hot water supply. Shows that the combination of an electric immersion heater with a storage tank and coal- or coke-fired water heater can be economical and efficient. The whole theory and practice of domestic water heating is covered, including much data from recent research. 25/- net from all booksellers. By post 25s 7d from The Publishing Dept., Dorset House, Stamford Street, London, S.E.1.

STRUCTURAL STEELWORK



NORTH WHARF ROAD, PADDINGTON, LONDON, W.2 Phone: PADdington 8486-7

Duresco

Products

DURESCO PRODUCTS LTD., CHARLTON, LONDON, S.E.7
Telephone: GREENwich 0034

The right start

We are familiar with the 'office-boy to Chairman' routine in Big Business. But where does an Interior Decorator, who eventually reaches the top, begin?

Some light was thrown on this subject by a description of the new P. & O. luxury liner, the Arcadia, which told us that the lady who designed the decorations "started her career . . . under a foreman painter at a local builder's."

And when we come to think of it, how and where could she have started better? For it's in the paint-shop that the meaning of colours—their blending and balancing—are truly appreciated; and their practical application best understood.



Send for your copy of the new colour card of Silcolac and Duresco Enamel gloss finishes.



SANITARY ENGINEERS AND FIRECLAY MANUFACTURERS

SCOTSWOOD-ON-TYNE

London Showroom: 54, VICTORIA STREET, S.W.1

STRUCTURAL ECONOMY FOR THE ARCHITECT & BUILDER

This book, by G. Fairweather, F.R.I.B.A., aims at making a critical analysis of traditional forms of construction with the following objectives: to identify the main characteristics of buildings as these are determined by the materials and methods used for their construction; to examine these characteristics in relation to the functions and respects in which traditional forms of construction fall short of present-day requirements and to offer suggestions for improvement.

21s. 0d. net. By post 22s. 1d.

Published for THE ARCHITECT & BUILDING NEWS

Obtainable at all booksellers or direct from:
The Publishing Dept., Dorset House, Stamford Street, London, S.E.1

POST-WAR REBUILDING . . .

PORTLAND STONE MONKS PARK STONE

THE BATH AND PORTLAND STONE FIRMS LTD.

Head Office:
BATH
Tel.: 3248-9

PORTLAND
Tel.: 3113

LONDON OFFICE:
Grosvenor Gardens House, S.W.1
Tel.: VIctoria 9182-3.

LIGHT STEELWORK (1925) LTD.

HYTHE ROAD,
WILLESDEN, N.W.10

Telephone: LABDROKE 3674

STEEL STAIRCASES
BALUSTRADES AND
HANDRAILS

INDEX TO ADVERTISERS

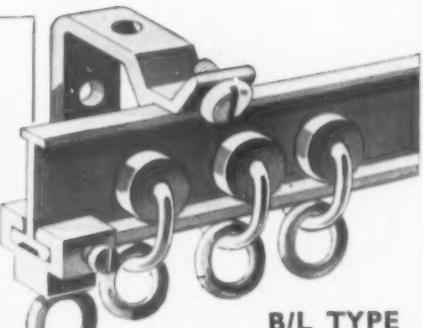
Official Notices, Tenders, Auction, Legal and Miscellaneous Appointments on pages 32 and 33

Adamite Co., Ltd., The	27	Eagan, R. E., Ltd.	29	Kay & Co. (Engineers), Ltd.	14	Rubberoid Co., Ltd., The	12
Adamsez, Ltd.	34	Eideelman, J.	18	Kings Langley Engineering Co., Ltd.	26	Rudkin, S. O., & Co., Ltd.	27
Adams Hydraulics, Ltd.	26	Electrolux, Ltd.	16	Kinnear Shutters	27	Smith's Fireproof Floor, Ltd.	18
Bath & Portland Stone Firms, Ltd.	34	Ellis School, The	28	Lacrinoid Products, Ltd.	31	Soundproof Construction	28
Baume & Co., Ltd.	24	Engert & Rolfe, Ltd.	27, 28	Laing, John, & Sons, Ltd.	21	Southern Forge, Ltd.	25
Blundell, Spence & Co., Ltd.	6	Finnish Lion Board	27	Outside Back Cover	10	Spencer Lock & Co., Ltd.	28
Briggs, Wm., & Sons, Ltd.	19	Freeman, Joseph, Sons & Co., Ltd.	3	Light Steelwork (1925), Ltd.	34	Stanley, W. F. & Co., Ltd.	30
British Hermeseal, Ltd.	31	French, Thomas, & Sons, Ltd.	Inside Back Cover	Lindsay's Paddington Iron Works (1948), Ltd.	33	Steven, A. & P., Ltd.	27
Cafferata & Co., Ltd.	4	Gardner, H., & Co., Ltd.	30	Margolis, M.	28	Sundeal Board Co., Ltd.	8
Cellon, Ltd.	27	Gardner, J., & Co., Ltd.	28	Marley Tile Co., Ltd., The	21	Thompson, John, Beacon Windows, Ltd.	5
Clarke Billard Engineering Co., Ltd.	12	Gas Council	9	"Mechanical Handling"	10	True Flue, Ltd.	27
Coverite (Asphalts), Ltd.	28	Gaskell & Chambers, Ltd.	20	Midland Woodworking Co., Ltd., The	7	Turner, C., & Son, Ltd.	10
Dunlop & Ranken, Ltd.	Inside Front Cover	General Electric Co., Ltd., The	13	"Motor Transport"	29	Turners Asbestos Cement Co., Ltd.	17
Durasteel, Ltd.	30	Gibson, Arthur L., & Co., Ltd.	27	Mullen & Lumsden, Ltd.	27	Vulcanite, Ltd.	28
Duresco Products, Ltd.	34	Gray, J. W., & Co., Ltd.	28	Range Boilers, Ltd.	11	Ward, Thos. W., Ltd.	15
		Gulf Radiators, Ltd.	14	Robertson Thain, Ltd.	22	Wardle Engineering Co., Ltd., The	16
				"Royal Board"	28	Wates, Ltd.	2
						Williams & Williams, Ltd.	1

Printed in Great Britain for the publishers, ILIFFE AND SONS LTD., Dorset House, Stamford Street, London, S.E.1, by CORNWALL PRESS LTD., PRINCE'S GARDEN, London, S.E.1.

Every new building calls for
the specification of
'Rufflette'
CURTAIN RUNWAY SYSTEMS

'Rufflette' Brand Runways, either corded or non-corded, are being increasingly used as landlord's fixtures in many new building schemes. Full details will be supplied on request.



B/L TYPE

This is a strong corded or non-corded 'Rufflette' runway for all general purposes. Also available in plastic.

FOR BAY WINDOWS

'Rufflette' Brand Curtain Runways have been developed for every curtain suspension need. Shown on the right is the new cord-controlled 'Rufflette' runway for fitting to bay windows.



FOR STRAIGHT RUNS

For straight runs, curtains can be effortlessly opened or closed with this 'Rufflette' cord-controlled runway with sliding overlap arm. Brackets are top or face fixing, and are designed to save valuable fitting time and cost on the job.



**CHosen BY
THE FOLLOWING
AUTHORITIES**

ILFORD BOROUGH COUNCIL
WANDSWORTH BOROUGH COUNCIL
LEWISHAM BOROUGH COUNCIL
WILLESDEN BOROUGH COUNCIL
FINCHLEY BOROUGH COUNCIL
WOOD GREEN BOROUGH COUNCIL
POPLAR BOROUGH COUNCIL
WIMBLEDON BOROUGH COUNCIL
GREENWICH BOROUGH COUNCIL
STOKE NEWINGTON BOROUGH COUNCIL
ISLINGTON BOROUGH COUNCIL
HOLBORN BOROUGH COUNCIL
LEYTON BOROUGH COUNCIL
WEST GAM BOROUGH COUNCIL

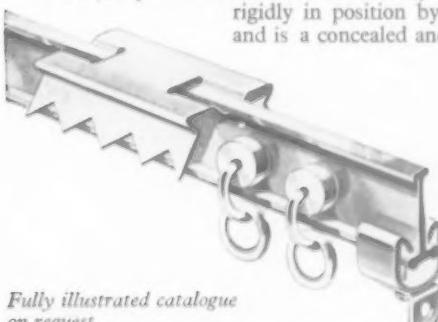
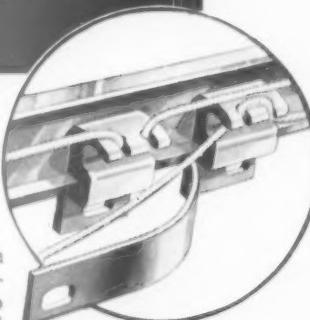
LONDON COUNTY COUNCIL
BUCKS COUNTY COUNCIL
SURREY COUNTY COUNCIL
MIDDLESEX COUNTY COUNCIL
KENT COUNTY COUNCIL
ESSEX COUNTY COUNCIL
SCHOOLS

WAK OFFICE (MARRIED QUARTERS)
R.A.F. (MARRIED QUARTERS)
POLICE (MARRIED QUARTERS)
HOSPITAL MANAGEMENTS COMMITTEE

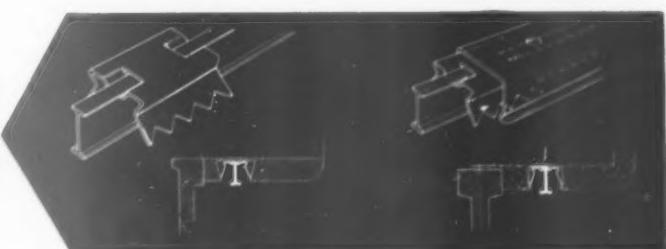
* Note the curved travelling section which enables curtains to be overlapped without cutting rail.

**OR AS A BUILT-IN
INTEGRAL UNIT**

'Rufflette' Brand Recessed Curtain Runway is a permanent and integral part of building construction. It is inexpensive and can be fitted into wood or plastered lintels. The runway is held rigidly in position by a patent spring clip without screws and is a concealed and permanent fitting.



Fully illustrated catalogue
on request



THOMAS FRENCH & SONS LTD., CHESTER ROAD, MANCHESTER, 15. Also at London, Wythenshawe, and in U.S.A. and Canada



Designed by the Chief Architect's Division, Ministry of Works

Britain's Plutonium Factory

At Britain's Plutonium Factory at Sellafield in Cumberland, with its two stacks over 400 feet high, two large natural uranium atomic piles are producing fissile material.

Building and civil engineering works by this Company include the two atomic piles, cooling reservoir, blower houses, ancillary buildings, and roads and railways in the pile group.

LAING

JOHN LAING AND SON LIMITED - GREAT BRITAIN, CANADA, UNION OF SOUTH AFRICA, RHODESIA
BUILDING AND CIVIL ENGINEERING CONTRACTORS